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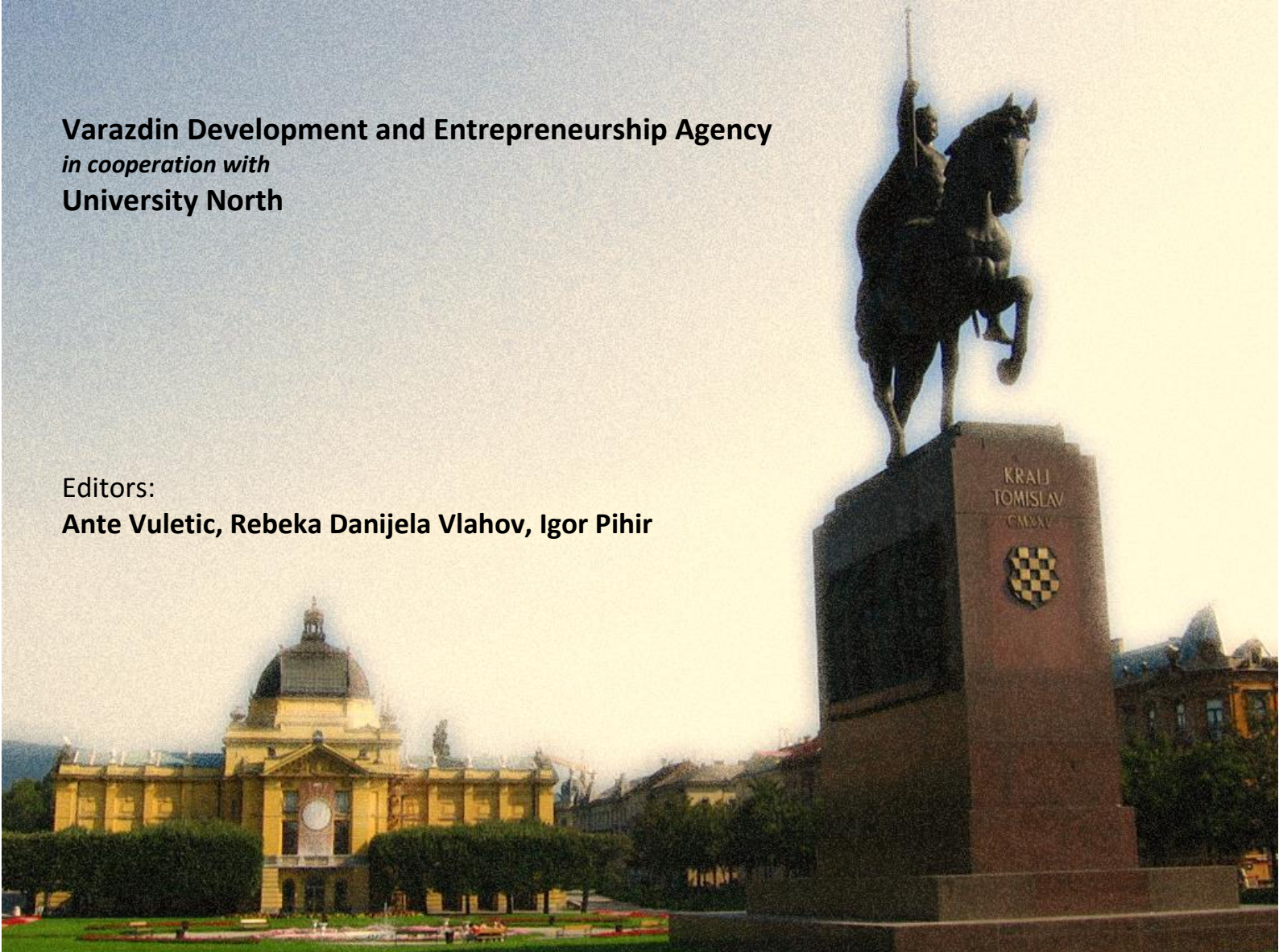
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Editors:  
**Ante Vuletic, Rebeka Danijela Vlahov, Igor Pihir**



## **Economic and Social Development**

11th International Scientific Conference on Economic  
and Social Development – Building Resilient Society



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Zagreb, 17-18 December 2015

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## Building Resilient Society

## EFFECTIVE MANAGEMENT OF HUMAN RESOURCES IN CATERING AFFECTS THE DEVELOPMENT OF TOURISM AND ECONOMIC DEVELOPMENT

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### **ABSTRACT**

*Human resource management in the hotel industry plays a crucial role to the success of catering business. Persons offer services to people and this is not at the best level, because in order to always provide adequate services you must motivate the staff. A good management of human resources in the catering business also means staff motivation which is one of the main problems in the hotel business in Kosovo. The purpose of this study is the development of human resources towards professionalism in the field of catering while maintaining the current staff through better motivation. Research question of this paper work is: what are the strategic ways that enable the development of tourism through human resource management in hotels. While taking a representative sample we have surveyed workers in the hotels, what motivates them to stay in the job where they work. As well as other sub-questions are what are the possible reasons for the change of work place, as well as are they also participants in decision-making process together with the managerial staff and are their recommendations taken under consideration. The methodology used for the study is quantitative. For the academic world, study is to understand how complexity, the similarities and differences of common tools of motivation for catering organizations and when it is necessary to use them. In conclusion, this study suggests a "model of motivation for hotel businesses" encouraged by the literature used and research results.*

**Keywords:** Human Resources, Hospitality, Management, Motivation, Tourism

### **1. INTRODUCTION**

The study reflects in a modest way the development of curative tourism in the region Anamorava. Curative spa tourism is developed at the thermal mineral springs, which in our region are numerous thanks to diversified geological construction. In this regard, the study reflects the natural resources that enable this development. This tourist movement cannot be understood without the influence of numerous cultural assets that are provided by curative areas. For each curative area are recorded notable curative tourism developments, reality and prospects for the future. This study will focus more on human resources management in the hotel sector, giving great importance to human resources which are directly connected with the guests wish. This means that we will address the management and staff employees in the institutions that offer their services to tourists.

### **2. ACTUAL STATE OF TOURISM IN THE REGION OF ANAMORAVA**

The hotel sector in Kosovo is not very developed and the need for investment in infrastructure but also in the field of education that has to do with capacity building for management of hotels or restaurants. We can say that only in 7 cities of Kosovo and it not at the all ones, there is hotel development without distinguishment to the previous years. According to statistics, the hotel and restaurant sector in 2013 employed 8.731 workers, unlike 2012 that had 8.360 employees

and in 2011 had employed in this sector 8.260. While, only in 2013 the annual turnover of hotels and restaurants was 86,185,406 or 1.13% of total turnover for 2013 (Agency of Statistics 2014). This percentage shows that hotels and restaurants need a promotion or incentive to develop; referring to the tourism resources that Kosovo possesses.

According to the registry categorization of accommodation facilities only 17 hotels are categorized according to the Ministry of Trade and Industry and are licensed (Ministry of Trade and Industry, 2014).

Sustainable tourism viewed globally more and more is playing the role of sustainable development of certain tourist destination. Tourism as an industry itself, within the global economy is very important in terms of generating financial revenues and the creation of new jobs. Besides the important economic effects that create in terms of economy, tourism plays an important role in cultural, social and political aspects because it enables the recognition of cultures of different countries and people.

Kosovo's geographical position can be seen as very appropriate category in the overall assessment of the country's tourism. With its geographical area that Kosovo has enables the development of transit tourism, because the roads here are interwoven to many directions, which connects different parts of the Balkans and Europe.

According to the terrain of the mountains capacities of Kosovo, at the Albanian Alps and Sharr mountains can be constructed 20 tourist centres for winter tourism and sports with skiing opportunities for skiers with capacity of nearly 250 thousand (Millaku, 2008).

These grounds are characterized by the heavy snow fall, the quality and the long duration of snow (over 4 months), which enables the development of winter sports. On the other hand, Kosovo's mountains are rich in wildlife, and rivers with rare quality fish, which increases the overall value of this area. Kosovo is also characterized by river gorges and canyons and caves, as characteristic forms, and all these present tourist complementary motifs in Kosovo, in particular the areas where they are located.

Thermo-mineral sources (Peja spa, Klllokot, Banjska Mitrovica), but also other sources, which are not yet in use pose special tourism motives, based on the values of the warm waters, which create opportunities for development of health tourism.

In Kosovo there are cultural and historical monuments of different historical eras, ranging from the prehistoric period to the new history of Kosovo (Castle of Jasharaj), which enable the development of cultural and historical tourism.

Some of the reasons cited are located near roads, near cities or in the cities, which creates conditions for their involvement in tourism. Most of Kosovo's cities are characterized by cultural and historical monuments from different periods. Characteristic of this area are also ethno-social motives. It is worth noting the coloration of national costumes where there are more than 30 kinds of national costumes that stand with the originality of creation, dances and folk songs, specific music instruments, the music source, the products of artisans and many others, are an important factor in assessing Kosovo's tourist market.

Generally, all these represent good opportunities for an attractive tourist offer for tourists.

### **3. DEFINITION OF TOURISM**

Tourism appears complex in theoretical studies, as well as in the application in practice. It is considered today as an exhorting factor with diverse effects on the economy, society, culture, environment etc. As such, tourism is subject of theoretical treatments for sociologists, anthropologists, geographers, writers, economists, architects and environmentalists, etc.

Tourism consists in moving people from place of current residence in another country, where at least one night stay, for leisure or for work. This is one of the definitions of modern tourism, which includes all the elements of its place of departure, displacement, length, motivation etc. There are many definitions that rely on the tourist movement, free movement of persons across

borders, new trends of doing tourism etc. In this context, to define what tourism is, it is very complex (Bagnoli, 2009). This is also true for the definition of curative tourism.

In economic terms the terminology, market, means all activities carried out for a specific product or service. So the market exists only when there is supply and demand for products or services. Even tourism has its tourism market, in which, on one hand, there is a demand from tourists for tourist products or services, on the other hand, the offer which offers tourism products or services. Services in the tourism market could be;

- Setting - offered by establishing facilities;
- Food provided by hotels, restaurants and pizzerias;
- Transportation, which could be air transportation, rail, automotive and marine;
- Cultural, visits of monuments of cultural heritage;
- Entertainment, visit entertainment centres, various parks;
- Sports, various sports grounds.

This shows that the tourism market is very big market very dynamic and complex, which in itself includes many actors. According to many studies conducted, they have shown that the tourism product is participating with more than 15% in international exchanges (Gorica, 2003). Kosovo tourism market comprises of a wide host of natural and anthropogenic motives. With the number and value of tourist motives Kosovo leads in comparison to many Balkan countries. This large concentration of motifs is the result of specific and socio-historical nature conditions. Linear distribution and grouping of touristic motives is Kosovo's biggest advantage for the tourist evaluation. Most of these motifs represent independent wealth, especially when it comes to tourist motives of Albanian Alps, Sharr, or cultural-historical monuments.

In this paper we will only focus on human resources management in the hospitality industry and restaurants that are one of the dominant factors in the promotion of tourism in a country. The tourism sector is primarily concerned with the provision of services and belongs to the tertiary sector, and the staff is a relevant factor in the smooth running of the business. High quality service, in gastronomy is the result of successful interaction between customers and employees. This interaction begins with the creation of good interpersonal relationships in hotel enterprises. These relationships exist, as in direct relation to the service provider-client, as well as relations within the organization (Zendeli, 2008).

#### **4. PURPOSE AND THE STUDY OBJECTIVES**

The purpose of this study is the development of human resources towards professionalism in the field of gastronomy while maintaining the current staff through better motivation.

For the academic study is to understand how the complexity, the similarities and differences of common tools of motivation for hotel organizations and when necessary to use them. In conclusion, this study suggests a "model of motivation for hotel businesses" promoted from the used literature and research results.

The objectives of this study are:

Identify methods of motivation for employees in the hotel sector.

- Analysis of conditions of workers

The rate of development of the tourism industry depends on the activity of the hotel which offers services to tourists. In catering are few jobs where the worker does not communicate directly with the client. Thus, he is directly involved in the creation of the tourism product (Zendeli, 2008).

Labour force gives an important contribution to the achievement of strategic goals for the present but also for the future. The quality of labour is a function of the recruitment and selection process.

Recruitment is a process through which a hotel or business tends to attract a number of candidates with whom they can fill vacant jobs. The recruitment process is like in a hotel and



in another business, but the characteristics and criteria required are different. The process starts with determining the exact needs of the workforce that has a hotel, analysing a preliminary analysis of the post. Then, set concrete objectives of recruitment, such as: characteristics of applicants, the period of their employment (long-term or short-term), will require candidates who are well prepared or those who demonstrate that they are capable of being trained further. The criteria that a candidate must fulfill:

- Physical characteristics
- Qualifications
- Work experience
- Ability to learn
- Personality

Types of training in hotels and restaurants;

Initial training - this training helps to introduce general hotel information and skills needed to work. It promotes building good relations between employees and management also.

Training through testing and providing the certificate - this training aims to promote skills and motivation of employees when they are able to acquire this exam.

Simulation training - practical training with help of HRD in order to improve working methods and enhance work efficiency through realistic simulation of the place where they work.

Language training - the hotel staff must have the basic skills of knowing of one or more foreign languages. English as an international language should be spoken by all staff, and knowledge of other languages depends on the location of the hotel.

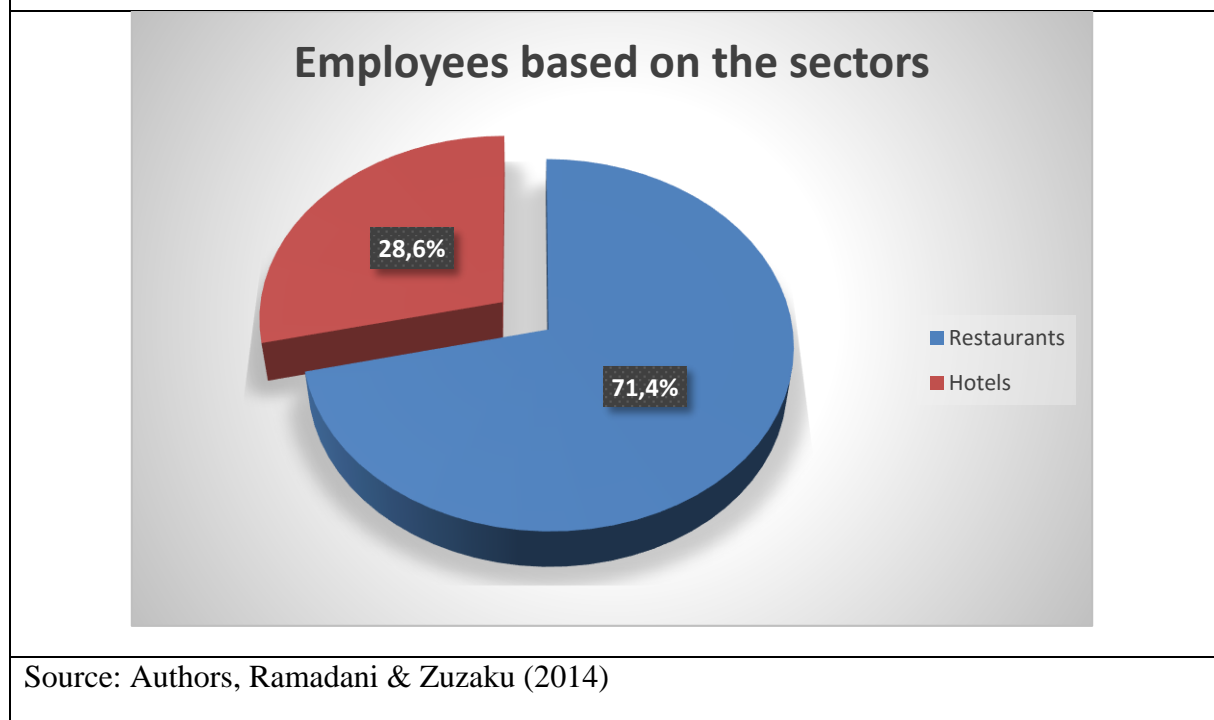
## **5. HYPOTHESES AND WORK METHODOLOGY**

Research question of this paper is: what should take the hotel business managers do in order to stop workers from fleeing the catering activity in other sectors. Also as under other questions are what are the possible reasons for the change of work place and position, as are participants in decision-making together with the managerial staff and a deal based on their recommendations. Training the staff of the hotel is also a very important factor that plays in motivating hotels workers, while making them more professionalized in its field and motivate them more to love and practice their profession.

The hypothesis of this paper is that the professionalization of the hotel workers and their motivation influences the development of tourism.

We are taking a representative sample we surveyed workers in the hotel, what motivates them to stay in work where they work. This hypothesis we tried to verify conducting a survey with 168 employees mainly working in the hotel as waiters. Selection of respondents was conducted randomly by interviewing respondents who work in hotels and restaurants.

*Chart 1: Employees based on the sectors*



The respondents were about 71% restaurant employees and about 29% of hotel employees. The research was conducted on the entire territory of Kosovo in December 2014, and lasted 25 days. The methodology used for the study is quantitative.

## 6. ANALYSES, INTERPRETATION OF THE DATA

Development, promotion and the goal of motivating employees is important in the field of business activity. Every business activity is conditioned by the motivation of the individual, ie the entrepreneur as the owner of the means in achieving manufacturing or service tasks defined as motivation for the purpose of income generation that serves as the basis for coverage of his needs and satisfaction.

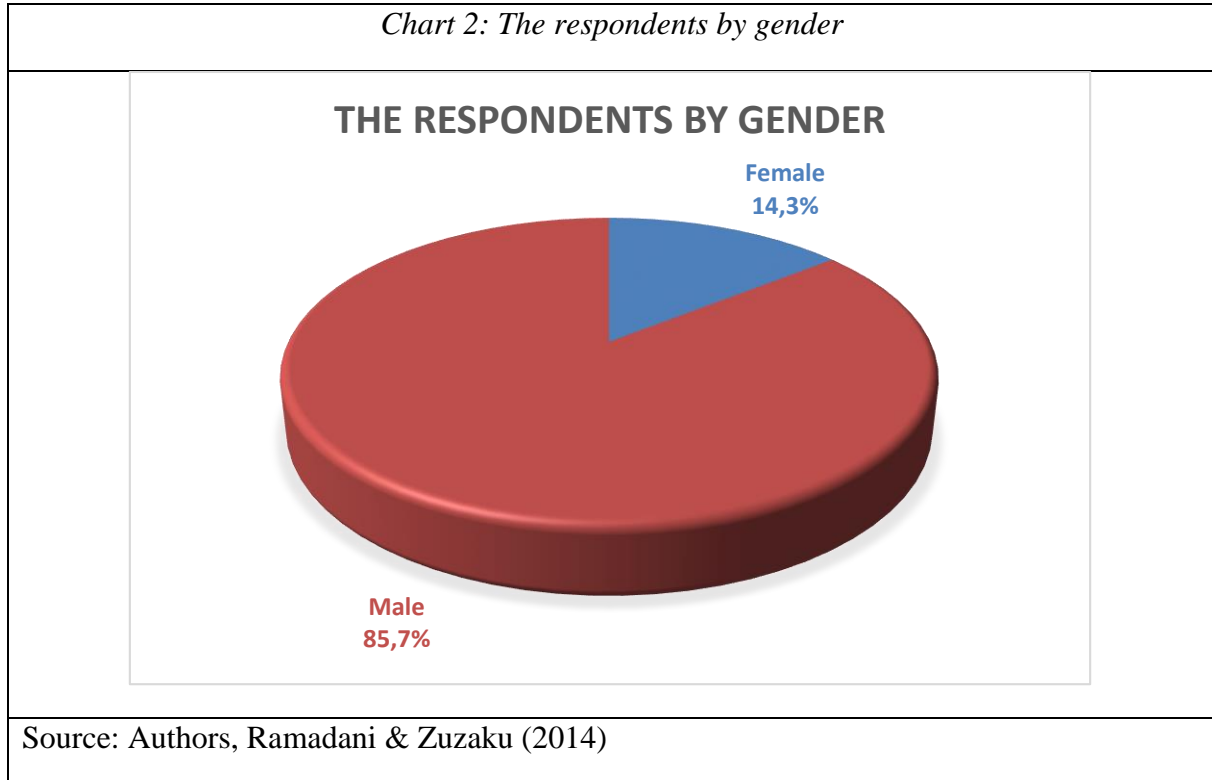
Motivating an individual is a combination of desire and energy directed at achieving the goal. Influencing the motivation of someone, means to do it like what you know you should do (Murtezaj 2007).

The needs are the central motive of the individual and are treated in different ways in every scientific theory of motivation. Motivation is defined in many ways. According to the psychological lexicon motivation is "behavior aimed toward a goal, which triggers the need caused by man". Motives always cause certain behaviors. They in terms of psychological factors are different, in the form of emotion, instinct, distress etc. Often people do not even understand why they do something or know that, they do not know how to explain their motives. According to psycho-analytical theory many motives are unconscious. Motivation is the impulse that sets, maintains and seeks human behavior. It derives from the phenomenon of the relationship between behavior and meeting needs. To every man there is an energetic potential, motivation keeps that was once the action started and aims to satisfy any need (value). For successful performance of tasks the individual should be fit. If he lacks the ability to perform their duties will not help them any motivation and stimulation.

Psychologists in this regard differ mechanical ability, the ability of coordination, intellectual ability and creative ability, so, inter-action rapport between aptitude and motivation pose that performance that means:  $Performance = Ability \times Motivation$ .

In our research we focused on satisfaction of the workers with employer, analyzing whether the workers are motivated with salaries that have and how they are trained during their careers at the company. The structure of the respondents by gender is 85.7% male and 14.3% female. Worth mentioning that females surveyed their position was mainly reception- or employee in the administration. In reality the percentage of women working as waitresses is still small. It is a taboo which must be broken maybe in the future and need to work to motivate them for this profession.

*Chart 2: The respondents by gender*



The respondents by marital status are almost similar, surveyed 57% are married and 43% single. The age of the respondents mainly regards three divisions which we did: 15-24 42.9% and as surveyed ages of 25-34. While 35-44 years old were interviewed 14.3%. It is worth mentioning that the sample was accidental. Over half of the respondents are students 57%, in secondary education 14.3%, while 28.7% with faculty.

*Table nr. 1: The demographic data of the respondents*

		Frequency	Percentage	Accumulation
Marital status	married	96	57.1	57.1
	Single	72	42.9	100.0
	Total	168	100.0	
Age	15-24	72	42.9	42.9
	25-34	72	42.9	85.7
	35-44	24	14.3	100.0
	Total	168	100.0	

Education	High school	24	14.3	14.3
	Student	96	57.1	71.4
	Faculty	48	28.6	100.0
	Total	168	100.0	
Source: Authors Ramadani & Zuzaku (2014)				

## 7. INTERPRETATIONS OF THE DATA

As part of this research it was analysed the working experience in the hotel, where over half of the respondents or 57.1% stated that they have experience between 1-3 years. With experience: 4-7 years of work have been declared only 28.6 percent and 14.3% stated that have over 8 years of experience in the hotel sector (see Table 2 ).

*Table nr. 2: Results of developed research*

		Frequency	Percentage	Cumulating
Work experience	1-3 years	96	57.1	57.1
	4-7	48	28.6	85.7
	Over 8 years	24	14.3	100.0
	Total	168	100.0	
Have you finished the adequate education for gastronomy?	No	144	85.7	85.7
	Yes	24	14.3	100.0
	Total	168	100.0	
Are you satisfied with the salary?	No	120	71.4	71.4
	Yes	48	28.6	100.0
	Total	168	100.0	
Do you think you should be paid more?	No	48	28.6	28.6
	Yes	120	71.4	100.0
	Total	168	100.0	
Are you motivated by the salary that you get?	No	144	85.7	85.7
	Yes	24	14.3	100.0
	Total	168	100.0	
Is the annual leave paid by the employee?	No	72	42.9	42.9
	Yes	96	57.1	100.0
	Total	168	100.0	
Have you participated to any training for the respective profession?	No	144	85.7	85.7
	Yes	24	14.3	100.0
	Total	168	100.0	
What motivates you?	Salary	48	28.6	28.6
	Good working conditions	24	14.3	42.8



	Good treatment from the employer	27	16.1	58.9
	Nothing motivates me/there's no other job option	69	41.1	100.0
	Total	168	100.0	
Do you think of ending the career in gastronomy?	No	144	85.7	85.7
	Yes	24	14.3	100.0
	Total	168	100.0	

Source: Authors Ramadani & Zuzaku (2014)

The majority of respondents, or 85.7% did not perform adequate hotel school, but work in the hotel sector.

Regarding salary satisfaction that they receive from the hotel sector only a small fraction of 28.6% are satisfied with the salary they receive, as opposed to 71.4% are not satisfied with their salaries. The same percentage of respondents thinks they deserve greater reward/salary. Regarding annual leave over half of the respondents or 57.1% stated that it is paid compared with 42.9% whom annual leave is not paid.

Worrying these results is that only 14.3% have participated in trainings for the respective sector they work. Since, 85.7% stated that have never participated in trainings.

*Chart 3: Motivation of the employees for the job they do*

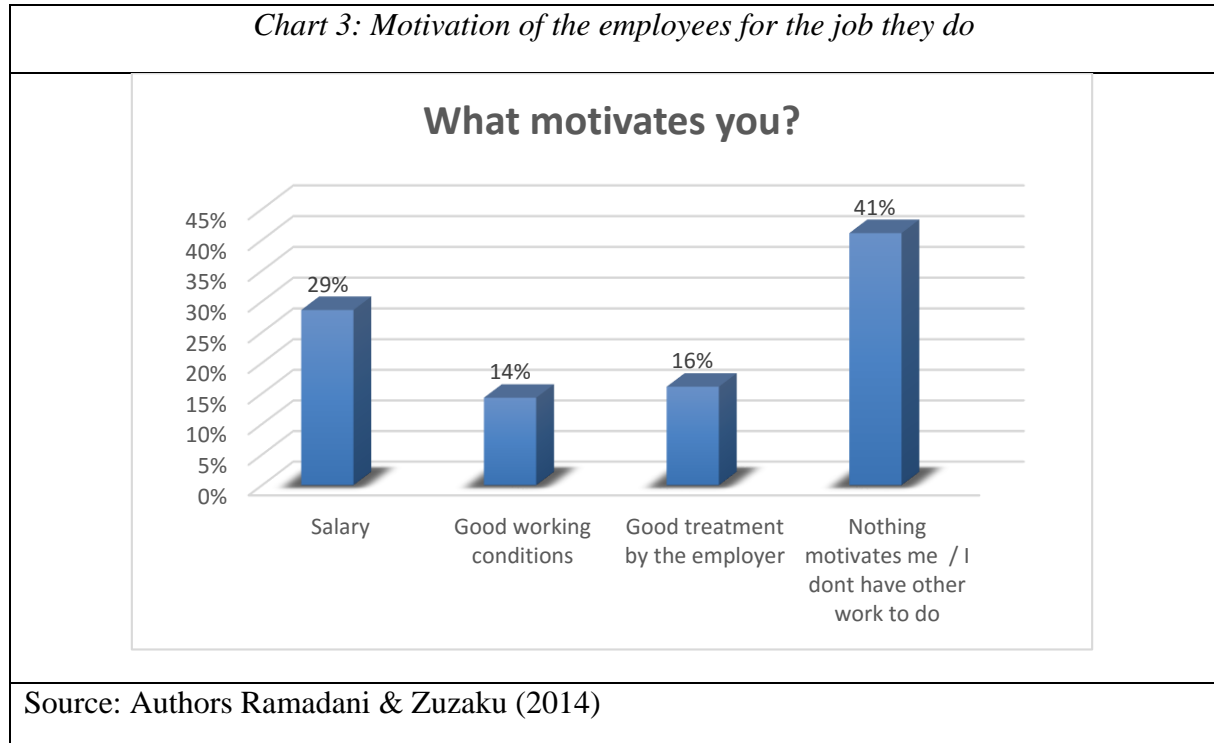


Chart nr. 3 shows that 41.1% of respondents are not very motivated, but the work they do is simply because they cannot find another job. Salary motivates only 28.6% of respondents.

While the best treatment for work and good conditions are motivation for 16.1% respectively 14.3% of respondents.

Of the respondents only 14.3% believe that will finish their career at the work they are doing in the hotel sector. While 85.7% if a chance is given will change and regularly think of another job.

## 8. CONSLUSION

From this research we can conclude that the hotel sector is still underdeveloped, as is still small number of female working in this sector. Also, employees are mostly students or high school students and without adequate education for tourism. The hotel employees are mostly young and only a small percentage over the age of 35. Also, a negative side is that over half of workers have only 1-3 years' work experience in this field; this means that if they are given the opportunity for a better job, they will change their job. Also, employees are not satisfied with the wages of hotels and should have a greater development in order to have the wage increases in this sector.

Another factor that affects the development of the hotel is the training of their staff, which in this research confirmed that there is a very low number of trained staff.

It is noteworthy that the majority of respondents do not think that they will finish their careers in current profession.

From the findings of this research, we recommend that the awareness should be raised firstly to the parents and then children and of the students of vocational schools in order to professionalize in this field. Also, encouragement of the female participation in this sector should be higher. Increase control of the labor inspectorate and to pressure the owners in payment of pension contributions and payment of annual leave under the applicable law, in a way that the workers are more motivated and give their contribution in this area.

The important thing is for the government to think of a program to train hotel staff so that they provide professional services to their clients, which will result to the increase of the overall revenue.

## LITERATURE

1. Kosovo Statistics Agency . (2014).Revenue and employment of businesses based on NACE 1 for the year 2010-2013. Prishtina: ASK.
2. Gorica, K. (2003). Trade marketing albanian touristic marketing –economic necessity. Tiran: Morava.
3. Kruse, K. E. (2012). Employee Engagement 2.0: How to Motivate Your Team for High Performance (A Real-World Guide for Busy Managers). United States of America: The Kruse Group.
4. Mazreku, I. (2010). Management bases . Prishtina: Dispenc.
5. Millaku, B. (2008). Basic determinants and prospects of tourism development in Kosovo Logos, 11-19.
6. Ministry of Trade and Industry. (2014). Categorization register of accomodating units . Prishtina: MTI.
7. Pesonen, J. (2013). Developing Market Segmentation in Tourism: Insights from a Finnish Rural Tourism Study. Finland: Publications of the University of Eastern Finland.
8. Zendeli, M. (2008). Attraction, "Link" and retaining of the personnel at the hotel enterprises. Logos, 99-113.

## ARABLE SOILS PRICE IN ALBANIA: A METHODOLOGICAL APPROACH

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### ABSTRACT

*This study discusses the price methodology of arable soil applied in Albania the last decade, giving explicit attention to the relationship between independent variables that determine the soil quality and soil variability prices of these soils. This study was undertaken in the context of determining the values for compensation and replacement of owners during the construction/operational phase of Trans Adriatic Pipeline onshore part that passes in Albania. In general, the land price (money value) is based on the average market price (sale – purchase transactions) adjusted with the specific characteristics of the site, inflation, time and potential production. The main characteristics of the land market in developed countries are the importance of the number of transactions and the relative transparency of prices. For several reasons, in many areas of Albania, there are not sufficient number of transactions to serve as a basis for setting a price of agricultural, pasture and forest land. Because of the lack of land market, it is advisable to use the methodology applied in Albania based on the method drafted by FAO in 1976 and land categorisation based on Land Capability Classification. In order to find out the profit, it is necessary to know the yield, the cost of producing it and the incomes per surface unit, in order to calculate the profit. The method applied after 2012 in Albania is based on market price. This methodology is desirable (it is real, compelling for the seller and buyer) and the Albanian legislation gives priority to such method whenever it is possible. According to preliminary data, in the majority of Albanian regions, the number of transaction is small, making it difficult to calculate average prices. Compensation and replacement values found by both methods are compared mentioning their application gaps in three eco climate regions.*

**Keywords:** climatic zones, methodologies, price, soil, variables

### 1. INTRODUCTION

The Land Reform that took place in Albania after drastic political changes, in the total absence of land market, required urgent assessment of agricultural land for public purposes, the

consolidation of the fragmented plots, and the need of the establishment of agricultural enterprises. So the need of creation of the initial land market required the reference prices determination. What determines the agricultural land values? It is a question that had bothered decision makers for a long time. This question has been raised for more than 200 years from economists in developed countries and has been an important research topic in agricultural economics throughout the last century (Robison et al., 1985; Shaik et al., 2005). Most studies analyzing the determinants of land sales prices either refer to the net present value (NPV) method or to the hedonic pricing approach as a basis of their work (Feichtinger & Salhofer ). The evaluation of agricultural land is based on the direct method of value according to market transactions that have been already made and on the indirect method in case the market of agricultural land is absent. The aim of this study is to compare the valuation of agricultural lands in three different eco-climate areas in central Albania to identify gaps in the determination of prices and the value difference between the two methods.

## **2. LAND EVALUATION (OR CAPABILITY CLASSIFICATION), BASIC ELEMENT ON ECONOMIC EVALUATION**

Two key concepts play major role on economic land evaluation: inherent quality and dynamic quality of soil. Characteristics, such as texture, mineralogy, etc., are innate soil properties determined by the factors of soil formation, climate, topography, vegetation, parent material and time. Collectively, these properties determine the inherent quality of a soil. They help compare one soil to another and evaluate soils for specific uses. For example, all else being equal, a loamy soil will have a higher water holding capacity than a sandy soil; thus, the loamy soil has a higher inherent soil quality. This concept is generally referred to as *soil capability*. More recently, soil quality has come to refer to the dynamic quality of soils, defined as the changing nature of soil properties resulting from human use and management. Some management practices, such as the use of cover crops, increase organic matter and can have a positive effect on soil quality.

Land capability classification shows, in a general manner, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit.

*Land Capability Classification.* This method was established by the Soil Conservation Service de USA according to the system proposed by Klingebiel and Montgomery (1961) and has been widely used throughout the world with numerous adaptations. It is a categorical system that uses qualitative criteria. The inclusion of a soil within a class is made in the inverse manner—that is, without directly analysing its capacity, but rather its degree of limitation with respect to a parameter according to a concrete use. Some factors that restrict soil use can be used to define the productive capacity (intrinsic: soil depth, texture, structure, permeability, rockiness, salinity, soil management; extrinsic: temperature and rainfall) and yield loss (slope of the terrain and degree of erosion).

*The FAO Framework for Land Evaluation (1976)* The FAO Framework for Land Evaluation (FAO 1976 and subsequent guidelines: for agriculture, 1983; forestry, 1984; irrigated agriculture, 1985; extensive grazing, 1991) is considered to be a standard reference system in land evaluation throughout the world, and has been applied both in developed as well as developing countries.

This framework is an approach, not a method. It is designed primarily to provide tools for the formulation of each concrete evaluation. The system is based on the following concepts: i) the land is qualified, not only the soil. ii) land suitability must be defined for a specific soil use (crop and management). iii) land evaluation was to take into account both the physical



conditions as well as economic ones; iv) the concept of land evaluation is essentially economic, social and political. v) the evaluation requires a comparison between two or more alternative kinds of use.

### **3. METHODOLOGICAL APPROACH**

In general, the price (money value) of land, is based on the average market price (sale – purchase transactions) adjusted with the specific characteristics of the site, inflation, time and potential production. The major characteristic of the land market in developed countries is the importance of the number of transactions and the relative transparency of prices. Inside the EU the data are collected and published by Eurostat in “Agricultural Land Prices and Rents in the European Union for the period decided”

Certain principles are fundamental to the approach and methods employed in land evaluation. These basic principles are as follows:

Land suitability is assessed and classified with respect to specified kinds of use. This principle embodies recognition of the fact that different kinds of land use have different requirements.

Evaluation requires a comparison of the benefits obtained and the inputs needed on different types of land. In qualitative evaluation, economics may be employed in general terms only, without calculation of costs and returns. In quantitative evaluation the comparison of benefits and inputs in economic terms plays a major part in the determination of suitability.

Evaluation is made in terms relevant to the physical, economic and social context of the area concerned.

Such factors as the regional climate, levels of living of the population, viability and cost of labour, need for employment, the local or export markets, systems of land tenure which are socially and politically acceptable, and availability of capital, form the context within which evaluation takes place.

The aspect of environmental degradation is taken into account when assessing suitability. There might, for example, forms of land use which appeared to be highly profitable in the short run but were likely to lead to soil erosion, progressive pasture degradation, or adverse changes in river regimes downstream.

Evaluation involves comparison of more than a single kind of use.

This comparison could be, for example, between agriculture and forestry, between two or more different farming systems, or between individual crops.

#### **3.1. Soil price in Albania**

For several reasons, in many areas Albania, there are not sufficient number of transactions to serve as a basis for setting a price of agricultural, pasture and forest land. This shortage poses two problems:

1. Arable land surface as well as other categories of land per capita or per family in Albania are much smaller compared even with the Region (in Albania there are 400000 farms which got a land based on Law no. 7501 or 1 ha per family on average). Therefore, for poor people mentality, land serves as a last resource or a safety net for survival and thus it is not sold; in most of the cases it is rented out. Adding the conservatory tradition in terms of land ownership, there are very few or even no transactions.
2. Even when transactions are made, due to taxes and tariffs involved, these are not declared or those are under declared in the Register of immovable property.

From 1992 to 2013 in Albania, land has been acquired for public purposes by applying the FAO method, mentioned above, which is based on the capitalization of net profit: The method has

been approved by the Decisions of Council of Ministers of Albania (1992, 1997, 2000) and the Decision of the Albanian Parliament nr. 183, on date 20.04.2005.

In 2012, due to land market development, and based on DCM date 6.9.2012, it was approved the method of valuation of land price by the land market; in other words based on the value of the averaged price of land in regional level. This method has been applied since March 2013.

### 3.2. The method of capitalization of net profit.

*The principle of this method*<sup>1</sup> consists in calculating the annual profit by the land on which basis the land price can be estimated using the method of profit capitalization. This method will be used for the valuation of the agricultural land, forest and pastures.

In order to find out the profit, it is necessary to know the yield, the cost of producing it and the incomes per surface unit, then the profit is capitalized.

The resulting value is adjusted then by these coefficients:

- the category of the land* [ $K_{f. Gr.}$ ]. In Albania, according to the agronomic potential productivity the lands are grouped in 6 categories from I to VI, the first category corresponds to the highest agronomic potential productivity. The forest and pasture lands are assessed under the fifth category (category V).
- the irrigation coefficient* [ $K_{irrigation}$ ] varies between 0.6 to 1.0 according to land categories.
- the coefficient of the distance* [ $K_{distance}$ ] from the urban or developed area. The distance taken into consideration is the lowest 10km and the highest 30 km, whilst the corresponding coefficients are from 0.930 to 1.
- the development coefficient* [ $K_{development}$ ]. The country (Albania) is divided in 4 regions and the corresponding coefficients range from 0.930 to 1.
- the land use coefficient* [ $K_{land use}$ ], which based on the annual use of the land and it varies from 1.25 for the coastal area to 1.15 for hilly area and 1.05 for the mountain area.

Therefore, finally the land price will be calculated using this formula:

$$Land Price = [100 * Net Profit) / \% of Bank interest] * [K_{f. Gr.}] * [K_{irrigation}] * [K_{distance}] * [K_{development}] * [K_{land use}]$$

The method consists in some stages of study and calculations which are detailed below:

### 3.3 Direct method of agricultural soils

DCM "Approval of methodology of land evaluation in Albania" establishes that the determination of the price of agricultural land is based on the data collected by the sale purchases in the Immovable Proprieties Registration Office – IPRO in each of the 12 regions of Albania. For each region is calculated (i) the minimum price and maximum price of sale contracts for each category of property, in the cadastral area; (ii) the calculation of the average of sale contracts for a specific category of property in the relevant cadastral area; (iii) initially are excluded the values 5% lower and higher of sales contracts. If after this exclusion the immovable property value cannot be calculated, is followed by excluding the values 10% lower and higher of sales contracts; (iv) the mode is calculated for each category of property in a cadastral area, according to the total number of contracts. Mode is the value that is mostly repeated; (v) the price of the unit surface (in m<sup>2</sup>) for each cadastral area.

### 3.4. Soil price comparison by two methods

Three different cadastral areas with different chemical-physical qualities and variable area of arable soil in three regions with different eco-climates have been considered. For these the price

has been calculated based on the soil category (Soil Science Institute, 1992) and on the two methods previously discussed: the indirect method (the capitalization of the net profit) and the direct method (average price of market arable soil). In this calculation has been taken into account the cadastral area no. 1934 in Korca (Mediterranean continental climate) with a surface of 2031 ha, the cadastral area no. 3340 in Berat (Mediterranean sub-continental climate) with a surface of 2430 ha, and the cadastral area no. 2672 in Fier (Mediterranean climate) with a surface of 1460 ha. The calculated prices are presented on Table 1.

Table 1. The price calculated according two methods in three climatic zone in the central part of Albania (in €)

Categories	Irrigation system (Yes/No)	Agroclimatic zone (1,2,3)								
		(1)Mediterranean weather (Berat, Fier, Lushnje)			(2)Mediterranean Sub-continental (Berat, Skrapar)			(3)Mediterranean Continental (Korce, Devoll)		
		Price according net profit method	Price according direct method	Difference	Price according net profit method	Price according direct method	Difference	Price according net profit method	Price according direct method	Difference
I	Y	6.89	3.76	-45.5	2.97	1.97	-33.7	5.38	2.93	-45.6
	N	4.14	3.76	-9.2	1.79	1.97	10.4	3.23	2.93	-9.3
II	Y	5.72	3.76	-34.3	2.46	1.97	-20.0	4.46	2.93	-34.4
	N	4.01	3.76	-6.2	1.73	1.97	14.0	3.12	2.93	-6.2
III	Y	4.49	3.76	-16.2	1.93	1.97	2.2	3.49	2.93	-16.2
	N	3.59	3.76	4.8	1.54	1.97	27.8	2.80	2.93	4.6
IV	Y	3.24	2.64	-18.5	1.40	1.21	-13.3	2.53	2.44	-3.4
	N	2.91	2.64	-9.3	1.26	1.21	-3.4	2.28	2.44	7.2
V	Y	1.93	1.93	0.0	0.83	0.79	-5.2	1.51	1.36	-10.0
	N	1.74	1.93	11.1	0.75	0.79	4.8	1.36	1.36	0.0
Average value		3.87	3.17	-12.3	1.6	1.5	-1.6	3.02	2.5	-11.3
SDV		1.5	0.7		0.6	0.5		1.1	0.6	

The prices of arable soils in three climatic areas and five categories calculated by the two methods show that the price depend on (i) climatic location, (ii) land category, (iii) irrigation possibilities, and (iv) the calculation method applied.

According to the capitalization method, the average soil price in the Mediterranean climate is  $3,87 \pm 1.5$  €/m<sup>2</sup> and vary from 1.74 €/m<sup>2</sup> to 6,89€/m<sup>2</sup> for categories V and I, without and with irrigation, respectively.

The average soil price in the Mediterranean sub-continental climate is  $1,6 \pm 0.6$  €/m<sup>2</sup> and varies from 0,75 to 2,97 €/m<sup>2</sup>, while in the Mediterranean continental area the average soil price is  $3.02 \pm 1.1$  €/m<sup>2</sup> and varies from 1,36 to 5,38 €/m<sup>2</sup>.

According to the direct method of land market, the average prices were lower that the prices calculated with the capitalization method. They were 2.5 €/m<sup>2</sup>, 1,5 €/m<sup>2</sup>, and 3,17 €/m<sup>2</sup> in the continental, sub continental, and Mediterranean area, respectively. Average price calculated by the two methods is more differentiated in the Mediterranean region (12 %) and the continental region (11%), and less differentiated (1,6%) in the sub-continental area.

The price differences between the two methods are high in the land categories I e II for all the

regions; in land category I they vary from 45% (area 1 and 3) to 33% in the area 2. In category II soils the difference was about 34% (area 1 and 3) and 4.5% (area 2). Irrigation was also an important factor in the determination of soil price. The difference between irrigated and not irrigated soil for category I was 36% (area 1 and 2) and 23% (area 2).

Through all the climatic areas, the price difference decreases with the increase of land category (from category I to category V) and the presence or the lack of irrigation for both methods of calculation.

#### 4. CONCLUSION

The most applied and accepted method for arable soil valuation in all the countries with a developed market economy, is the method based on land market. This method reflects all the characteristics of agricultural soil, its use, suitability and capability. The net profit capitalization method is an indirect method, which tries to reflect the suitability and capability, but is not capable of reflecting the social-economic status and economic development level of a country. It has been used the indirect method in Albania for three main reasons: (i) lack of agricultural land price database because of the social/economic changes of '90, (ii) soil market deformation because the agricultural land changes destination easily from arable soil to urban land, so that after being sold the land can take other attributes than the agricultural production, and (iii) because of the taxing on the transactions, the prices registered at IPRO were much lower than the real ones. Important price differences can be noted between the two methods; they are up 45% higher in the indirect method compared with the direct method and more notable in two areas (1 and 3). The differences of average prices, for both methods, are higher for the soils of high agricultural productivity (categories I and II) and for the irrigated compared to not irrigated soils. The average prices calculated by the indirect method are higher for the high capability soils than in the vast majority of European countries (EUROSTAT 2015) and only in Malta, Cyprus, Netherlands and Denmark the prices are equal and/or higher. That is because of: (i) the tradition – the Albanians consider the land as a basic mean of production, and in lack of other alternatives, it is a property that cannot be sold, and (ii) the soil per capita in Albania is the lowest in Europe, only 0,14 ha/person.

#### LITERATURE

1. Feichtinger, P. and Salhofer K., (2011), *The Valuation of Agricultural Land and the Influence of Government Payments*. Factor Markets Working Paper No. 10/December 2011.
2. Robison, L.J., D.A. Lins and R. VenKataraman (1985), "Cash Rents and Land Values in U.S. Agriculture", *American Journal of Agricultural Economics*, Vol. 67, pp. 794–805.
3. Shaik, S., G.A. Helmers and J.A. Atwood (2005), "The Evolution of Farm Programs and Their Contribution to Agricultural Land Values", *American Journal of Agricultural Economics*, Vol. 87, No. 5, pp. 1190–1197.
4. A. A. Klingebiel, P. H. Montgomery,(1961), *Soil Conservation Service*, U.S. Department of Agriculture, - Land use, Rural - 21 pages.
5. FAO (1976). *A Framework for Land Evaluation*. Soils Bulletin 32, 72 pp. Rome: FAO Publications.
6. FAO (2003). *Overview of land value conditions*. AGL/MISC/35/2003.
7. EUROSTAT, 2015, Land prices and rents - annual data (apri\_ap\_aland)
8. Decision of the Parliament No. 183, date 28.4.2005 on "On Approval of the methodology for the evaluation of immovable property to be compensated and what will serve as compensation".
9. DCM no.658, date 26.09.2012,"Approval of Methodology for land evaluation in Republic of Albania, Official Journal, No.12, 2012.

## THE IMPORTANCE OF INNOVATION TO INCREASE THE VALUE OF SLOVENIA'S EXPORTS OF GOODS TO THE PACIFIC RIM COUNTRIES

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### ABSTRACT

*This paper discusses the importance of innovation to increase the value of Slovenia's exports of goods to the Pacific Rim countries. In 2013, the value of Slovenia's exports of goods to these countries amounted to €1,949 million, 9% of the value of Slovenia's exports of goods to the world and an increase of 2.7% from the previous year. In order to further increase the value of its exports of goods to these countries, Slovenia should increase the promotion of Slovenian products in the Pacific Rim markets and adopt some other measures, such as increasing the cooperation between Slovenian enterprises and their Pacific Rim counterparts in areas such as innovation. After all, in a competitive market, innovation is the most important source of competitive advantage.*

**Keywords:** *competitive advantage, innovation, innovative entrepreneurship, foreign trade, Pacific Rim, Slovenia.*

### 1. INTRODUCTION

Cooperation between organizations is an important factor in their success. In order to increase the competitiveness of Slovenian enterprises (especially small-to-medium-sized ones), Slovenia should increase their mutual cooperation and adopt some other measures, such as increasing their innovativeness. After all, innovative enterprises are an integral part of a competitive economy. For this reason, Slovenia should promote innovative entrepreneurship as a major factor of economic change. In order to further increase the value of Slovenia's exports of goods and services to the world, Slovenia should increase the innovativeness of Slovenian enterprises and increase their mutual cooperation in entering new foreign markets.

### 2. INNOVATION AS A SOURCE OF COMPETITIVE ADVANTAGE

Innovation is an integral part of modern business (Tidd and Bessant 2015) and an important source of competitive advantage (Tidd and Bessant 2014). After all, in a modern economy, enterprises need to innovate in order to be competitive and successful (Wagner 2012, Kriegsmann and Kerka 2014). Innovation is therefore essential for their survival. In order to increase the innovativeness of Slovenian enterprises (especially exporters), Slovenia should increase their inventiveness and remove any innovation barriers.

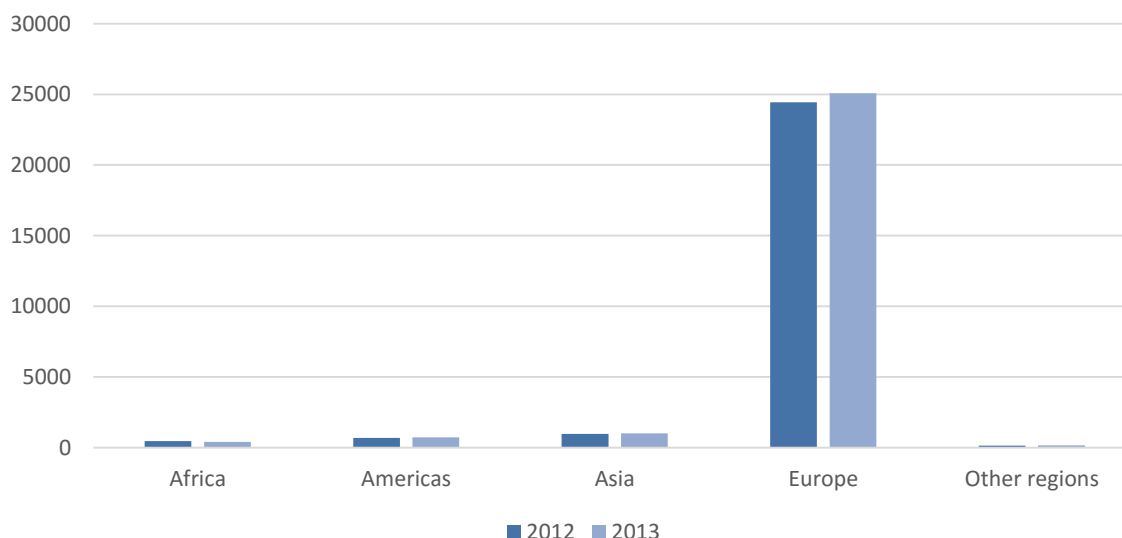
In recent years, innovation has become integral to the operations of many Slovenian exporters. One reason for this has been increased competition in their export markets. In order to improve the performance of the aforementioned exporters, Slovenia should increase their innovation excellence and promote their products in foreign markets.

### 3. SLOVENIA'S FOREIGN TRADE IN GOODS AND SERVICES

Slovenia is an open economy. In 2013, the value of Slovenia's trade in goods and services with the world amounted to €52,178.9 million, 144.4% of the value of Slovenia's gross domestic product (GDP) and an increase of 0.6% from the previous year. In the same year, the value of Slovenia's exports of goods and services to the world amounted to €27,392 million, 75.8% of the value of Slovenia's GDP and an increase of 2.5% from the previous year, while the value of Slovenia's imports of goods and services from the world amounted to €24,786.9 million, 68.6% of the value of Slovenia's GDP and a decrease of 1.5% from the previous year.

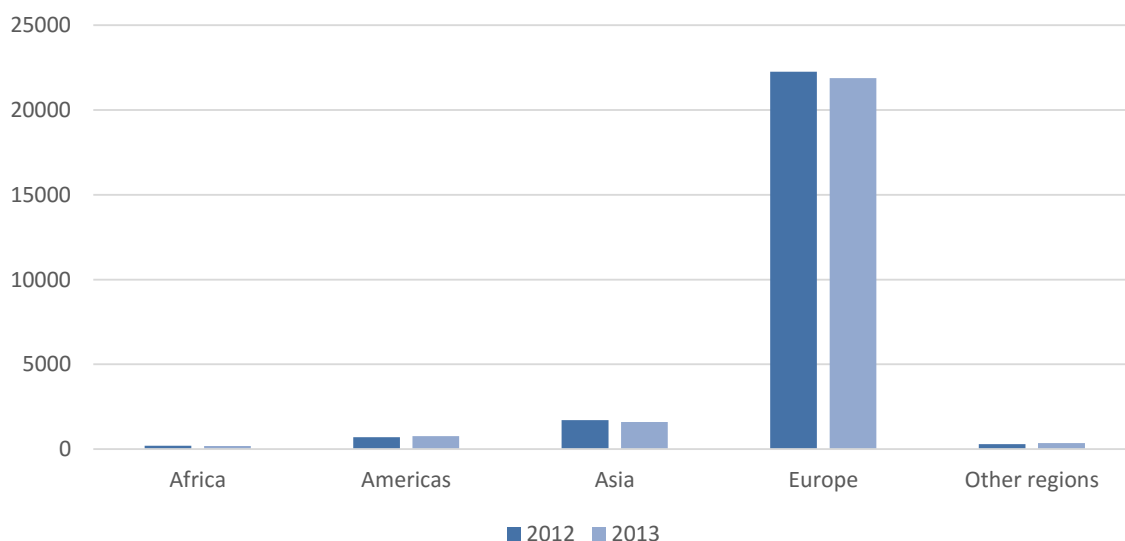
Europe is Slovenia's main trading partner. One reason for this is low transaction costs. In 2013, the value of Slovenia's trade in goods and services with Europe amounted to €46,947.3 million, 90% of the value of Slovenia's trade in goods and services with the world and an increase of 0.5% from the previous year. In the same year, the value of Slovenia's exports of goods and services to Europe amounted to €25,075.2 million (Figure 1), 91.5% of the value of Slovenia's exports of goods and services to the world and an increase of 2.6% from the previous year, while the value of Slovenia's imports of goods and services from Europe amounted to €21,872.1 million (Figure 2), 88.2% of the value of Slovenia's imports of goods and services from the world and a decrease of 1.7% from the previous year.

*Figure 1: Slovenia's exports of goods and services by region, 2012–2013, millions €.*



Source: Bank of Slovenia (2014).

Figure 2: Slovenia's imports of goods and services by region, 2012–2013, millions €.

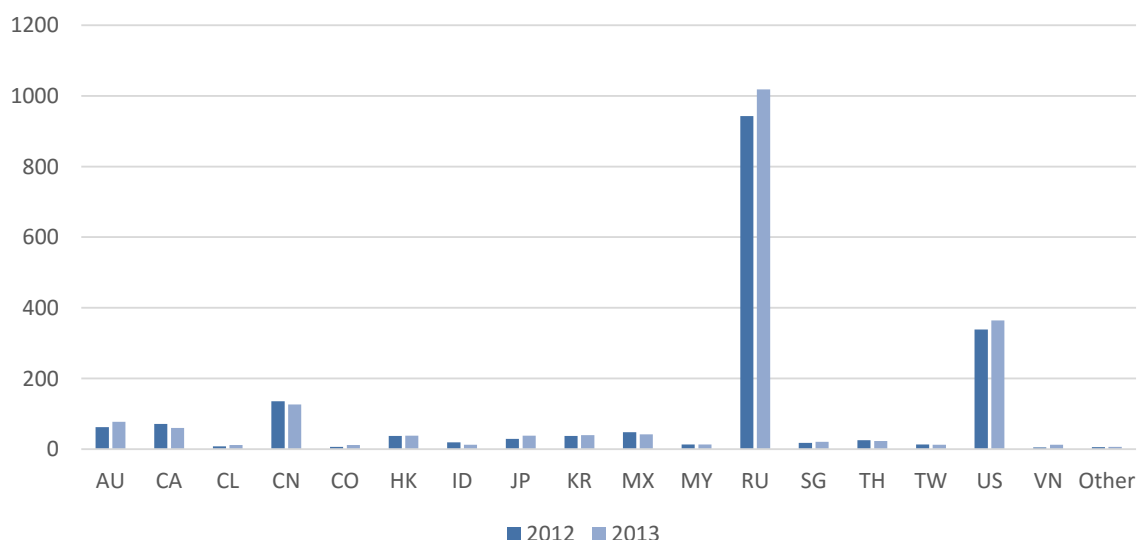


Source: Bank of Slovenia (2014).

#### 4. SLOVENIA'S TRADE IN GOODS WITH THE PACIFIC RIM COUNTRIES

In 2013, the value of Slovenia's exports of goods to the Pacific Rim countries amounted to €1,949 million, 9% of the value of Slovenia's exports of goods to the world and an increase of 2.7% from the previous year. In 2013, Slovenia's most important export partners among the aforementioned countries were China, the Russian Federation and the United States (Figure 3). In that year, the value of Slovenia's exports of goods to these countries amounted to €1,509.7 million, 77.5% of the value of Slovenia's exports of goods to the Pacific Rim countries.

Figure 3: Slovenia's exports of goods to the Pacific Rim countries, 2012–2013, millions €.



Notes: AU – Australia; CA – Canada; CL – Chile; CN – China; CO – Columbia; HK – Hong Kong; ID – Indonesia; JP – Japan; KR – Korea, Republic of; MX – Mexico; MY – Malaysia; RU – Russian Federation; SG – Singapore; TH – Thailand; TW – Taiwan; US – United States; VN – Vietnam.

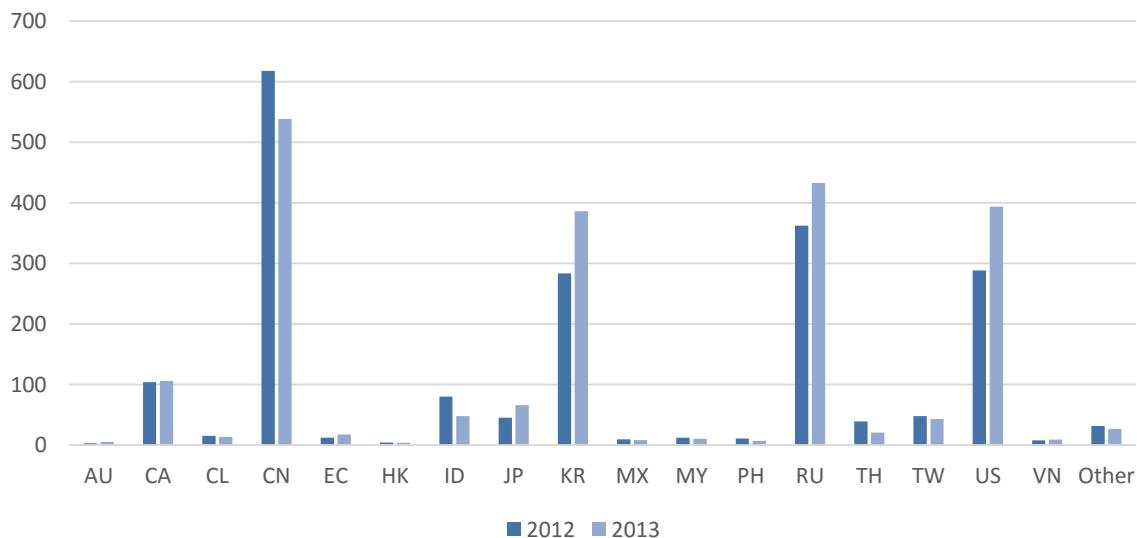
Source: Statistical Office of the Republic of Slovenia (2014).

In order to increase the value of Slovenia's exports of goods to the Pacific Rim countries, Slovenia should increase the promotion of (innovative) Slovenian products in these countries and adopt some other measures, such as increasing the cooperation between (innovative)

Slovenian enterprises in entering the Pacific Rim markets. It should also increase networking between Slovenian businessmen and their Pacific Rim counterparts.

In 2013, the value of Slovenia's imports of goods from the Pacific Rim countries amounted to €2,119.8 million, 9.6% of the value of Slovenia's imports of goods from the world and an increase of 0.5% from the previous year. In 2013, Slovenia's most important import partners among the aforementioned countries were China, the Russian Federation and the United States (Figure 4). In that year, the value of Slovenia's imports of goods from these countries amounted to €1,364.8 million, 64.4% of the value of Slovenia's total imports from Pacific Rim countries.

*Figure 4: Slovenia's imports of goods from the Pacific Rim countries, 2012–2013, millions €.*



Notes: AU – Australia; CA – Canada; CL – Chile; CN – China; EC – Ecuador; HK – Hong Kong; ID – Indonesia; JP – Japan; KR – Korea, Republic of; MX – Mexico; MY – Malaysia; PH – Philippines; RU – Russian Federation; TH – Thailand; TW – Taiwan; US – United States; VN – Vietnam.

Source: Statistical Office of the Republic of Slovenia (2014).

In 2013, Slovenia did not trade with the following Pacific Rim countries: American Samoa, the Cook Islands, East Timor, Guam, Kiribati, the Marshall Islands, the Federated States of Micronesia, Nauru, Niue, the Northern Mariana Islands, Palau, the Pitcairn Islands, Samoa, Tokelau, Tonga, Tuvalu, Vanuatu and Wallis and Futuna. There are several reasons for this, such as a lack of knowledge on behalf of these countries, which make up some of the world's smallest economies in terms of GDP.

Nevertheless, in order to increase the geographical diversification of its exports of goods and services, Slovenia should increase the competitiveness of Slovenian enterprises by increasing their mutual cooperation in entering new foreign markets. It should also increase their innovativeness. After all, innovation is an important source of competitive advantage. In order to achieve the aforementioned goal, Slovenia should increase the effectiveness of its innovation system and adopt some other measures, such as the promotion of best practice in innovation management.

## 5. CONCLUSION

Innovation is an important success factor for many Slovenian enterprises. This is especially true for those enterprises that operate in foreign markets (including the Pacific Rim ones). In order



to increase the competitiveness of Slovenian enterprises in these markets, Slovenia should increase the innovativeness of the aforementioned enterprises and adopt some other measures, such as the promotion of cooperation between these enterprises and their (main) stakeholders, in areas such as innovation. In order to increase the value of its exports of goods to the Pacific Rim countries, Slovenia should promote innovative Slovenian enterprises and their products in these markets. It should also promote innovative (start-up) entrepreneurship and cooperation between innovative (start-up) enterprises in entering the aforementioned markets.

## LITERATURE

1. Bank of Slovenia. 2014. "Current Account by Country". Accessed 10 October 2015. <https://www.bsi.si/iskalniki/prikaz-financnih-podatkov-en.asp?PodrocjeId=326&hSubmittedPodPodrocja=0&MapaId=324>.
2. Kriegsmann, Bernd, and Friedrich Kerka. 2012. "Unternehmerisches Innovationsmanagement". In *Handbuch Innovationen: Interdisziplinäre Grundlagen und Anwendungsfelder*, edited by Manfred Mai, 73–87. Wiesbaden: Springer Fachmedien Wiesbaden GmbH.
3. Statistical Office of the Republic of Slovenia. 2014. "Exports and Imports by Country, Slovenia, Monthly". Accessed 10 October 2015. [http://pxweb.stat.si/sistat/en/MainTable/tbl\\_2401721](http://pxweb.stat.si/sistat/en/MainTable/tbl_2401721).
4. Tidd, Joe, and John Bessant. 2014. *Strategic Innovation Management*. Chichester: John Wiley & Sons, Inc.
5. Tidd, Joe, and John Bessant. 2015. *Innovation and Entrepreneurship*. 3<sup>rd</sup> edition. Chichester: John Wiley & Sons, Inc.
6. Wagner, Marcus. 2012. "Entrepreneurship, Innovation and Sustainability: An Introduction and Overview". In *Entrepreneurship, Innovation and Sustainability*, edited by Marcus Wagner, 1–9. Sheffield: Greenleaf Publishing Ltd.

## GLOBAL UNDERSTANDING OF DEVELOPMENT IN HISTORICAL AND THEORETICAL CONTEXT

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### **ABSTRACT**

*This article provides a brief overview of the historical, institutional and theoretical understanding of global development. In this context, the focus of the analysis was on processes that have a significant influence on shaping the world after World War II. The crucial processes that have shaped the world after World War II were the process of decolonization as well as the creation and development of the UN system. The first process, the process of decolonization, was and still is implemented through the UN Special Committee on Decolonization in cooperation with specialized agencies. Decolonization is a very complex process and at the focus of this process are the developmental problems of former colonies. UN's system has, through the Special Committee on Decolonization and UN's specialized agencies, tried and is still trying to give valid answers to developmental problems of former colonies and other countries with development issues. In essence, the process of decolonization was and still is governed by the international system (UN) that is also developing itself. UN's system and its specialized agencies (IMF, WB and ILO) in cooperation with WTO and other international organizations tried to create a global economic system that would be the leading force in achieving global development. Somehow, these efforts in the form of projects, programs, resolutions and declarations, when they are applied in practice, do not deliver wanted outcomes, and they are often considered insufficient, inadequate and partial. Constructive criticism of the UN development projects should influence on improvement of global development programs.*

**Keywords:** *Decolonization, Development, International Labor Organization (ILO), International Monetary Fund (IMF), The World Bank (WB), United Nation Development Program (UNDP), World Trade Organization (WTO).*

### **1. INTRODUCTION**

The first chapter of the article (introduction) contains a brief explanation of the article structure. Basic historical observations of global development are explained in the second chapter, with special emphasis on the period after World War II and the process of decolonization. In the third, fourth and fifth chapters of the article, we have briefly elaborated the contribution of the IMF, WB, ILO and WTO to global development. The sixth chapter contains the elaboration of the importance of UNDP in achieving global development. In the seventh chapter, we have considered key development theories, approaches and models. In the final, eighth chapter, we have briefly presented the concluding remarks. The last, ninth part of the article, contains a list of references.

### **2. THE HISTORICAL CONCEPTUALIZATION OF THE DEVELOPMENT**

Historical conceptualization of development is a challenge for every researcher. Challenges are reflected in the fact that the process of social development has been taking place at the same time as the development of humans. Through the ages, people have tried to create social system that meet current and future needs (according to Marxist theoretical tradition, societal development went through phases of primitive community, slavery, feudalism, capitalism and socialism). There is no doubt that developmental problems are as old as human society; ever

since the ancient times, people have been trying to find an appropriate model of social organization that would bring prosperity and development. Different societies have, in different periods of time, created adequate development models that were guided exclusively by their national interests. Most of the development researchers consider that development in the global context can and should be analyzed from the end of World War II until today. The most common arguments found in literature are related to the fact that after the Second World War, people built an international system that allows global governing of development. This primarily refers to the UN system and its specialized agencies. Indeed, the UN system has had a leading role in carrying out global development. Since the UN system is a very complex one, the focus of this article will be on the most important processes and the major specialized agencies related to the achievement of global development. In the context of this article, special attention was on the process of decolonization, since most of underdeveloped countries are former colonies. Without diminishing the importance of other UN specialized agencies and programs, special attention, in the context of this article, was on the *International Monetary Fund (IMF)*, *The World Bank (WB)*, *International Labor Organization (ILO)*, *World Trade Organization (WTO)* and the *United Nation Development Program (UNDP)*.

### 2.1. Decolonization and development

Decolonization was conducted under strong influence of the UN. The basis for strongly promoting decolonization can be found in the *Charter of the United Nations (1945)* Chapters XI (Declaration regarding Non-Self-Governing Territories), XII (International Trusteeship System) and XIII (The Trusteeship Council). In 1960, the UN General Assembly adopted the *Declaration on the Granting of Independence to Colonial Countries and Peoples- Resolution 1514 (XV)* and *General Assembly Resolution defining the three options for self-determination- Resolution 1541 (XV)*. In the next year (1961), UN General Assembly adopted *Resolution 1654 (XVI)* through which the *Special Committee on Decolonization* was established. The process of decolonization was long and it was accompanied by numerous problems, solution for them was found within the UN through first (1990-2000), second (2001-2010) and third (2011-2020) International Decade for the Eradication of Colonialism. In that context, during the first period (1990-2000) the most important resolutions of UN General Assembly were: *General Assembly Resolution 43/47 International Decade for the Eradication of Colonialism (1988)*, *General Assembly Resolution 46/181- International Decade for the Eradication of Colonialism (1991)* and *General Assembly Resolution 53/68- Implementation of the Declaration on the Granting of Independence to Colonial Countries and Peoples (1999)*. During the second period (2001-2010) the most important resolutions of the UN General Assembly were: *General Assembly Resolution A/RES/55/146 - Second International Decade for the Eradication of Colonialism (2001)* and *General Assembly Resolution A/RES/60/120- Second International Decade for the Eradication of Colonialism (2005)*.

During the third period (2011-2020) the UN General Assembly adopted *Resolution A/RES/65/119- Third International Decade for the Eradication of Colonialism (2011)*. From these selected resolutions and declarations, we can see that decolonization has been a long-term, complex and complicated process. This process has opened a number of problems in different areas of state administration in former colonies. The countries that have gained independence had to govern crucial social areas such as internal and external security, education, health and social protection individually. It is important to emphasize that the process of decolonization was conducted during the Cold War and that the efforts of the former colonial powers were aimed at preventing the spread of socialism in former colonies. In this context, it is necessary to observe the projects and programs of the United Nations system and its specialized agencies that attempted to help former colonies in realizing their development, primarily through the Western model.

In addition to the decolonization, there was another global development challenge and that was the restoration of the world after the end of World War II.

## **2.2. Development after the World War II**

The history of humanity is marked by many wars different in nature, scope and consequences. The two world wars and their consequences have forever changed the course of development of human society. After the First World War, countries tried to find means for a peaceful cooperation in the form of the League of Nations (1919). This form of cooperation was not successful in preventing the Second World War from happening. After World War II, it was necessary to make greater and more concrete efforts to ensure that the destruction and suffering never happen again. The concretization of those efforts resulted in the emergence of the United Nations (1945) and Bretton Woods (1944) institutions (IMF, WB and later GATT/WTO -1995). Development has become a crucial international issue and it was necessary to create an adequate international economic system that would provide resources for global development. This economic system was formed inside the UN, specifically in its *Economic and Social Council (ECOSOC)* and its corresponding Commissions (functional and regional), programs and funds, specialized agencies, entities, other bodies, research and training institutions (UN Resolution 61/16, 2013; ECOSOC, 2015a., ECOSOC, 2015b., ECOSOC, 2015c). In the context of achieving global development through, the mentioned system, it was necessary, without diminishing the importance of other UN's specialized agencies, to focus on the contribution made by the *International Monetary Fund (IMF)*, *The World Bank (WB)* and *International Labour Organization (ILO)*. It is also important, in the context of global development, to briefly elaborate the cooperation between the UN system and the World Trade Organization (WTO). Specific focus was on the *United Nation Development Program (UNDP)*.

## **3. THE INTERNATIONAL MONETARY FUND AND THE WORLD BANK IN THE CONTEXT OF GLOBAL DEVELOPMENT**

The International Monetary Fund (IMF) and The World Bank (WB) were formed at an international conference convened in Bretton Woods, New Hampshire, United States in July 1944. The International Monetary Fund was created with the primary purpose to “ensure the stability of the international monetary system—the system of exchange rates and international payments that enables countries (and their citizens) to transact with each other” (IMF, 2015a). In addition to ensuring stability of the international monetary system, IMF promotes international monetary cooperation, offers policy advice and technical assistance to its member states. According to its mandat, IMF provides loans and adequate policy programs in order to help countries with problems in balance of payments (IMF, 2015b). IMF and WB are often called “Bretton Woods twins” since their projects and programs are largely complementary and mutually reinforcing. In this context, it is necessary to consider the importance of the World Bank. The World Bank "promotes long-term economic development and poverty reduction by providing technical and financial support to help countries reform particular sectors or implement specific projects" (IMF, 2015b). IMF and WB have a long history of colaboration in many forms such as high-level coordination, management consultation and staff collaboration (IMF, 2007; IMF, 2010). Since their founding until today, both institutions have, according to their mandates and collaboration agreement, been involved in reducing debt burdens (*Heavily Indebted Poor Countries, HIPC Initiative- 1996, Multilateral Debt Relief Initiative, MDRI -2005* and *Debt Sustainability Framework, DSF-2005*), reducing poverty (*Poverty Reduction Strategies in IMFsupported Programs, PRSP -1999, The IMF and the Millennium Development Goals, Post-2015 development agenda*) and assessing financial stability (*The Financial Sector Assessment Program, FSAP*) (IMF, 2015c; IMF, 2015d; IMF 2015e; IMF, 2015f; IMF, 2015g). The results of these collaborations primarily implemented in

regions such as Latin America, sub-Saharan Africa and former socialist countries, are subject to constant analyses and critics. Most authors (Cornia et al., 1987; Sachs and Williamson, 1986; Krugman, 1988; Krugman, 1989; Sachs, 1989; Bullock and Rogoff, 1990; Ghai, 1991; Mosley et al., 1991; Killick et al., 1992; Decone et al., 1997; George, 1998; Little and Olivei, 1999; Randel et al., 2000; Galbraith, 2000; North, 2000; Preworski and Vreeland, 2000; Bird, 2001; Whaites, 2001; Yeates, 2001; Esterly, 2001; Pincus and Winters, 2002; Crotty, 2002; Stiglitz, 2002; Vreeland, 2002; Kaptur, 2002; Sachs, 2002; Rogoff, 2003; Pettifor, 2003; Kohli, 2004; Reinert-2004; Bhagwati-2004; Hall et al.-2004; Cypher and Dietz -2004; Arslanalp and Henry, 2004; Arslanalp and Henry, 2005; Arslanalp and Henry, 2006; Cheru, 2006; Craig & Porter, 2006; Nafziger, 2006; O'Hara, 2006; Pettifor, 2006; Esterly, 2006; Sharma, 2008; Galbraith, 2009; Krugman, 2009; Peet and Hartwick, 2009) believe that the results of this cooperation in the context of framework for the aforementioned initiative and the other joint and individual projects provided limited results (structural adjustments, reforms and Washington consensus) in reduction of poverty and development in Latin America, sub-Saharan Africa and former socialist countries. These authors have shown different angles in which activities, projects and structural reforms that IMF and the WB created for those countries worked. Most of these authors believe that the results on the field are significantly different from expected and in that context there is considerable scope for correcting the identified deficiency. In 2007, in order to improve their cooperation, these institutions adopted *Joint Management Action Plan (JMAP)*, after which in 2010 they adopted the implementation assessment report for the *Joint Management Action Plan on Bank-Fund Collaboration (JMAP)*. The cooperation between these institutions is also a developmental process of building and modifying their capacity for action in terms of constant changes and new challenges.

#### **4. INTERNATIONAL LABOUR ORGANIZATION (ILO) AND DEVELOPMENT**

*International Labour Organization (ILO)* was formed in 1919 (Constitution of ILO was part of Versailles Treaty); in the context of this article, the focus is on the period after World War II (ILO become UN specialized agency in 1946). The development of ILO and its global influence was marked by three important processes: the Cold War, decolonization and the change in occupational and industrial structures (Rodgers, et al. 2009, p. 30). The *Declaration of Philadelphia (1944)* adjusted the principles and goals of ILO (social justice based on freedom, dignity, economic security and equal opportunity; labour is not a commodity; freedom of association, for both workers and employers, along with freedom of expression, and the right to collective bargaining; principles are fully applicable to all human beings, irrespective of race, creed or sex; Poverty anywhere constitutes a danger to prosperity everywhere, and must be addressed through both national and international action.) (Rodgers, et al. 2009, p.7). After World War II, there were significant changes in global political, social and economic circumstances and in that sense ILO had to adapt. The adjustment process was realized through adequate programs, conventions, declarations and protocols. ILO uses means of conventions, declarations and protocols to govern areas such as: freedom of association (No. 87), collective bargaining (No. 98), forced labour (No. 29), discrimination (No. 111), minimum age for labour (No. 138), child labour (No. 182), international labour standards (No. 144), house work (No. 1., No. 30., No. 31), unemployment (No. 2), maternity protection (No. 3), night work (No. 4., No. 6), workmen's compensation (No. 12), sickness insurance (No. 24., No. 25., No. 56), protection against accidents (No. 28., No. 32), old age insurance (No. 35., No. 36), invalidity insurance (No. 37, No. 38), survivor insurance (No. 39., No. 40), social security (No. 70, No. 82., No. 102), paid vacation (No. 72., No. 91), medical examination (No. 16, No. 77., No. 78., No. 113., No. 124), social policy (No. 177), invalidity (No. 128), paid educational leave (No. 140), human resource development (No. 142), working conditions (No. 172), part-time work (No. 175) and many other fields and areas of working conditions (ILO, 1996 - 2012). ILO

managed to integrate *Decent Work Agenda* (ILO, 1996-2015a) and its main objectives (promoting jobs, guaranteeing rights at work, extending social protection and promoting social dialogue) in global development projects such as *Millennium Development Goals 2000-2015* (ILO, 2008) and *2030 Sustainable Development Agenda 2015-2030* (ILO, 1996-2015b). The ILO had and still has an important role in achieving global development.

## 5. WORLD TRADE ORGANIZATION (WTO) AND DEVELOPMENT

In the context of global development, the focus of scientific community was also on activities undertaken by the *World Trade Organization (WTO)*. WTO is involved in global development through cooperation with the UN system on the basis of *Arrangements for Effective Cooperation with other Intergovernmental Organizations-Relations Between the WTO and the United Nations (1995)*. Negotiations and activities within the WTO are usually analyzed from the aspect of consequences of trade liberalization on developing countries. The subject of analysis was the influence of certain aspects of the WTO agreements (***General Agreement on Tariffs and Trade -GATT, General Agreement on Trade in Services- GATS***, the *Agreement on Trade-Related Aspects of Intellectual Property Rights- TRIPS* and *Agreement on Trade-Related Investment Measures- TRIMs*) on the development of underdeveloped countries. In this context, the most frequent concern is that some rules and standards are created in a way that their requires can be met only by the rich developed countries.

It is considered that the conventional instruments of foreign trade protection available to every country are replaced with a new form of protectionist instruments available only to the rich and technologically developed countries. In that sense, most authors refer to sanitary and phytosanitary standards (*Agreement on Sanitary and Phytosanitary SPS*) and patents (Sharma, 2008, p. 70-73). These examples (sanitary and phytosanitary standards and patents) are not problematic for developed countries, but they are becoming a real issue and a key barrier to developing countries. These countries simply do not have the capacity to comply with the aforementioned rules, and as a result, their export is limited. The aforementioned problems are recognized within the WTO, and the search for their solution is a continuous process. In the context of development, negotiations under *Doha Development Agenda (DDA)* are of particular importance because the “fundamental objective is to improve the trading prospects of developing countries” (WTO, 2015a). *Doha Ministerial Declaration (2001)* recognizes the problems of underdeveloped countries and offers them the opportunity to negotiate on the modalities for improving their trade capacity inside the framework of the WTO rules and regulations. Doha Round negotiation covers many fields but the most important are: agriculture, *Non-Agricultural Market Access (NAMA)*, services, rules, intellectual property: geographical indications and biodiversity, trade and environment, trade facilitation, special and differential treatment, dispute settlement, e-commerce, jargon buster and country groupings (WTO, 2015b). It is significant to emphasize that all WTO agreements (GATT, GATS, TRIPS and The Agreement of Establishing the WTO) have certain rules that give developing countries special rights. However, although it was considered that liberalization and free trade in combination with adjustments and reforms of the IMF and WB programs will accelerate development of these countries, the results were limited. In this sense, there was a need for revision of specific rules (differential treatment provisions or special and differential treatment) in the WTO contracts in order to help developing countries through trade. “The Bali Ministerial Conference in December 2013 established a mechanism to review and analyses the implementation of special and differential treatment provisions” (WTO, 2015c). The process of revision is conducted by the *Committee on Trade and Development (CTD)* that has mandate “to identify which of those special and differential treatment provisions are mandatory, and to consider the legal and practical implications of making mandatory those which are currently non-binding. In addition, the Committee is to consider ways in which developing countries, particularly the

LDCs, may be assisted to make best use of special and differential treatment” (WTO, 2015c). WTO recognized the needs of developing countries in reductions of trade costs and as a result, created *Aid for Trade initiative*. This initiative “encourages developing country governments and donors to recognize the role that trade can play in development. In particular, the initiative seeks to mobilize resources to address the trade-related constraints identified by developing and least-developed countries” (WTO, 2015d). *Doha Development Agenda* is important because it recognizes the importance of comprehensive treatment of development. Moreover, the WTO recognized its role and responsibilities in the future global development agenda.

## **6. UNITED NATION DEVELOPMENT PROGRAMM (UNDP) AND DEVELOPMENT**

In the context of understanding the global response on development challenges, it is important to briefly analyse the *United Nation Development Programm (UNDP)*. It is a well known fact that the UNDP was formed by consolidation of two UN programs "United Nations Expanded Programme of Technical Assistance, created in 1949, and the United Nations Special Fund, established in 1958. UNDP, as we know it now, was established in 1965 by the General Assembly of the United Nations" (UNDP, 2015a). According to their official website, UNDP focuses on sustainable development, democratic governance and peace building and climate and disasters resiliencies. In the context of this work, without undermining the importance of other fields of work, our focus is on sustainable development. The most important global development program administered by UNDP was *Millennium Development Goals (MDG's)* started in 2000 lasting until 2015 (UN, 2015). According to the UNDP MDG Report for 2015, most of the eight millennium development goals (Goal 1: Eradicate extreme poverty and hunger, Goal 2: Achieve universal primary education, Goal 3: Promote gender equality and empower women, Goal 4: Reduce child mortality, Goal 5: Improve maternal health, Goal 6: Combat HIV/AIDS, malaria and other diseases, Goal 7: Ensure environmental sustainability, and Goal 8: Develop a global partnership for development) were successfully implemented on a global level (MDG Group, 2015, p. 4-7). However, MDG's Group has identified deficiencies that should be corrected under the new sustainable development goals. The Millennium Development Goals, as it was pointed out, were the basis for a new development agenda based on seventeen sustainable development goals: Goal 1: End poverty in all its forms everywhere, Goal 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture, Goal 3: Ensure healthy lives and promote well-being for all at all ages, Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, Goal 5: Achieve gender equality and empower all women and girls, Goal 6: Ensure availability and sustainable management of water and sanitation for all, Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all, Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all, Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation, Goal 10: Reduce inequality within and among countries, Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable, Goal 12: Ensure sustainable consumption and production patterns, Goal 13: Take urgent action to combat climate change and its impacts, Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development, Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss, Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels and Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development (UNDP, 2015 b, p. 1-26). From the list of sustainable development goals, it is evident that the global

understanding of development includes all spheres of life. Considering the period planned for the implementation of SDG's (2015-2030), the results of this program can be expected in the future.

## **7. THEORETICAL UNDERSTANDING OF DEVELOPMENT**

The challenges of development were the subject of interest of many scholars and scientists. They spent years trying to find a functional solution for achieving development with adequate utilization of production factors (Jašarević, Jašarević, 2010. p. 107). In this sense, they created different theories, approaches and development models and their corresponding functions with the aim of explaining the interactions between production factors in order to achieve development. Through the analysis of literature, it is possible to single out the most important theories, approaches, models and concepts of economic growth and development. In the theoretical sense the most important theories are: theory of cumulative effects, theories and patterns of structural change, revolution theory of international dependence, public choice theory, theory of unbalanced development, theory of poles of development and new growth theory. Relevant approaches are: the neoliberal counter-revolutionary approach, approach to the free market and market-oriented approach. The key models of economic growth and development are: the model of development in stages, the model of structural change, international model of dependence, the model of neo-colonial dependence, false paradigm model (Osmanković, Pejanović, 2009. p. 19-38). The list of theories, approaches, models and concepts is not final and can be extended with: theories of development seen as modernization (naturalism, rationalism, civilized development, structural functionalism and economic modernization theory) and feminist theories of development (female development theory). In addition to the affirmative, there can be identified an unconventional critical theory of development such as: structural Marxism, imperialism, world system theory, the theory of regulation, critics Marxist, neo-Marxist theory, post-structuralism, post-colonialism and post development approach (Peet, Hartwick, 2009, p. 103-139, 159-181, 197-227, 240-272). In time, neoliberal models and approaches stood out from the mentioned theories, approaches and models and they were practically applied through the programs and activities of the UN system, the IMF and the World Bank in developing countries. The practical application of these approaches and models has become the subject of analysis and criticism since the results in practice were inadequate. Neoliberal theories, models and approaches such as neoclassical growth theory (Solow, 1956) and neoclassical counter-revolution approach (Johnson, 1971; Little, 1982; Lal, 1983; Bauer, 1984; Meier, 2000) did not manage to give an adequate response on development problems so that resulted in the appearance of two main contemporary development theories. Without diminishing the importance of the aforementioned theories, approaches and models, in the context of this article, special focus is put on contemporary development theories such as New Growth Theory and Theory of coordination failure. New Growth Theory emphasises the importance of investing in knowledge, that is according to Romer (1986, 1990, 1994) considered the inexhaustible source of ideas and opportunities that can be put in the function of achieving development. Investing in knowledge can, therefore, bring sustained growth (Dang and Pheng, 2015, p. 20). The other important theory is theory of coordination failure that emphasizes market failure at achieving coordination among complementary activities. As a result of this failure, there is a need for state intervention in correcting market imperfections. The theory argues that "when the market mechanism does not work, the active roles of the government need to be highlighted" (Dang and Pheng, 2015, p. 21). From these contemporary theories of development it is evident that development challenges require the cooperation of national and global actors in finding adequate modalities of cooperating between the government and the market. Theory and practice have both



confirmed that government regulation and the market cannot and must not be opposed, rather both systems should be in interaction and cooperation in order to achieve development.

## 8. CONSLUSION

The world has changed significantly after World War II. Many processes that were initiated at that time are still ongoing and they present a global development challenge. In that sense, global development was and continues to be the responsibility of national governments and international organizations. The UN system and other international organizations accepted their responsibilities in achieving global development. In practice, this means that all member states should take, and must take an active role in shaping and implementing the global development projects through the UN system. The process of global development is a complex process in which there is always room for improvement and constructive criticism should be encouraged. In that sense, all future development programs and institutions responsible for their implementation at the national and international level need to be open to constructive criticism. The UN system must develop an appropriate coordination mechanism to correct the identified deficiencies in projects, programs and agendas. The 2030 Agenda for Sustainable Development presents a global development project that applies experience from previous development programs, and in that sense it should deliver adequate results.

## LITERATURE

### Books

1. Bauer, P. T. (1984). *Reality and Rhetoric: Studies in the Economics of Development*. London: Weidenfield & Nicolson.
2. Bhagwati, .J. (2004). *In Defense of Globalization*. New York: Oxford University Press.
3. Cornia, G., Jolly, R. and Stewart, F (1987). *Adjustment with a Human Face*, 2 vols. Oxford: Clarendon Press.
4. Craig, D. and Porter, D. (2006). *Development beyond neoliberalism?: governance, poverty*. London and New York: Routledge Taylor & Francis Group.
5. Cypher, J.M. and Dietz, L. J. (2004). *The Process of Economic Development 2nd Edition*. London and New York: Routledge Taylor & Francis Group.
6. Deacon, B., Hulse, M. and Stubbs, P. (1997). *Global Social Policy: International Organizations and the Future of Welfare*. London: Sage.
7. Easterly, W. (2001). *The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics*. Cambridge, MA: MIT Press.
8. Easterly, W. (2006). *The White Man's Burden: How the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good*. New York: Penguin.
9. George, S. (1998). *A Fate Worse than Debt: The World Financial Crisis and the Poor*. New York: Grove Press.
10. Ghai, D. ed. (1991). *The IMF and the South*. London: Zed Books.
11. Hall, A., Midgley, J., Beall, J., Bhatia, M., Mossialos, E (2004). *Social Policy for Development*. London; Thousand Oaks; New Delhi: SAGE Publications.
12. Jašarević, F. i Jašarević, Z. (2010). *Politička ekonomija*. Sarajevo: Interlinea.
13. Kohli, A. (2004). *State-Directed Development Political Power and Industrialization In The Global Periphery*. New York: Cambridge University Press.
14. Lal, D. (1983). *The poverty of "Development Economics"*. London: Institute of Economic Affairs.
15. Little, I. M. D. (1982). *Economic development: Theory, Policy, and International Relations*. New York: Basic Books.
16. Mosley, P. Harrigan, J, and Toye, J. (1991). *Aid and Power: The World Bank and Policy-based Lending*. 2 vols. London: Routledge.

17. Nafziger, E.W (2006). *Economic Development 4<sup>th</sup> Ed.* Cambridge: Cambridge University Press.
18. O'Hara, P. A (2006). *Growth and Development in the Global Political Economy Social structures of accumulation and modes of regulation.* London and New York: Routledge Taylor & Francis Group.
19. Osmanković, J. i Pejanović, M. (2009). *Euroregije i Bosna i Hercegovina-drugo dopunjeno izdanje.* Sarajevo: Fakultet političkih nauka.
20. Peet, R., Hartwick, E. (2009). *Theories of Development Contentions, Arguments, Alternatives- Second Edition.* New York: The Guilford Press.
21. Pettifor, A. (2003). *Real World Economic Outlook: The Legacy of Globalization – Debt and Deflation.* New York: Palgrave Macmillan.
22. Randel, R., German, T. and Ewing, D. eds. (2000). *The Reality of Aid 2000.* London: Earthscan.
23. Reinert, S. E. (2004). *Globalization, Economic Development and Inequality An Alternative Perspective.* Cheltenham: Edward Elgar Publishing Limited.
24. Rodgers, G., Lee, E., Swepston, L and Van Deal, J. (2009). *The International Labour Organization and quest and social justice 1919-2009.* Geneva: The International Labour Organization.
25. Sharma, S. D. (2008). *Achieving Economic Development in the Era of Globalization.* London and New York: Routledge Taylor & Francis Group.
26. Stiglitz, J. E (2002). *Globalization and Its Discontents.* New York: W.W. Norton.
27. Whaites, A. ed. (2001). *Precarious States: Debt and Government Service Provision to the Poor.* Monrovia, CA: World Vision International.
28. Yeates, N. (2001). *Globalization and Social Policy.* London: Sage.

**Monograph chapter, journal article**

1. Arslanalp, S. and Henry, P. B. (2004). *Helping the Poor Help Themselves: Debt Relief or Aid?.* in Jochnick, C. and Preston, F. Eds. *Sovereign Debt at the Crossroads: Challenges and Proposals for Resolving the Third World Debt Crisis.* pp. 174–196. New York: Oxford University Press.
2. Arslanalp, S. and Henry, P. B. (2005). *Is Debt Relief Efficient?.* The Journal of Finance. Vol. 60. No. 2. pp. 1017–1051.
3. Arslanalp, S. and Henry, P. B. (2006). *Debt Relief.* Journal of Economic Perspectives. Vol. 20. No. 1. Winter. pp. 207–220.
4. Bird, G. (2001). *IMF Programs: Do They Work? Can They be Made to Work Better?.* World Development. Vol. 29. No.11. pp. 1849–1865. Great Britain: Elsevier Science Ltd.
5. Bulow, J. and Rogoff, K. (1990). *Cleaning Up Third World Debt Without Getting Taken to the Cleaners.* Journal of Economic Perspectives. Vol. 48. No. 1. Winter. pp. 31–42.
6. Cheru, F. (2006). *Playing Games with African Lives: The G7 Debt Relief Strategy and the Politics of Indifference.* in Jochnick, C. and Preston, F. Eds. *Sovereign Debt at the Crossroads: Challenges and Proposals for Resolving the Third World Debt Crisis.* pp. 35–54. New York: Oxford University Press.
7. Crotty, J. (2002). *Why There Is Chronic Excess Capacity.* Challenge. Vol. 45. No.6. pp. 21–44. M. E. Sharp, Inc.
8. Galbraith, J. (2000). *How the Economists got it Wrong.* American Prospect. Retrieved from <http://www.prospect.org/print/V11/7/galbraith-j.html> (10.10.2015.).
9. Galbraith, J. (2009). *Who Are These Economists, Anyway?.* The Nea Higher Education Journal. Fall 2009. pp. 85-97.
10. Johnson, H. (1971). *A Word to the Third World: a Western Economist's Frank Advice.* Encounter. Vol. 37. p. 3–10.

11. Kaptur, D. (2002). *The Changing Anatomy of Governance*. in J. Pincus and J. Winters (eds). *Reinventing the World Bank*. pp. 54–75. Ithaca: Cornell University Press.
12. Killick, Tony, Moazzam Malik, and Marcus Manuel. (1992). *What Can We Know About the Effects of IMF Programmes?*. World Economy. Vol. 15. Issue. 5. pp. 575–598.
13. Krugman, P. (1988). *Financing versus Forgiving a Debt Overhang*. Journal of Development Economics. Vol. 29. No. 1–2. pp. 253–68.
14. Krugman, P. (1989). *Market-Based Debt Reduction Schemes*. in Frenkel, J., Dooley, M. and Wickham, P. Eds. *Analytical Issues in Debt*. pp. 258–78. Washington, DC: IMF.
15. Krugman, P. (2009). *How Did Economists Get it So Wrong?* New York Times Sunday Magazine. September 6, 2009.
16. Little, J. S. and Olivei, G. P. (1999). *Why the Interest in Reforming the International Monetary System*. New England Economic Review. September/October. pp. 53–84.
17. Meier, G. M. (2000). *The Old Generation of Development Economists and the New*. In G. M. Meier & J. E. Stiglitz (Eds.), *Frontiers of development economics: The future in perspective* pp. 13–50. Washington, D.C.: World Bank/Oxford University Press.
18. Pettifor, A. (2006). *The Jubilee 2000 Campaign: A Brief Overview*. in C. Jochnick and Preston, F. Eds. *Sovereign Debt at the Crossroads: Challenges and Proposals for Resolving the Third World Debt Crisis*. pp. 297–318. New York: Oxford University Press.
19. Pincus, J. and Winters, J. (2002). *Reinventing the World Bank*. in J. Pincus and J. Winters (eds). *Reinventing the World Bank*. pp.1–25. Ithaca: Cornell University Press.
20. Preworski, A. and Vreeland, J. (2000). *The Effect of IMF Programs on Economic Growth*. Journal of Development Economics Vol.62. pp. 385–421. Elsevier Science.
21. Rogoff, S. K. (2003). *Unlocking Growth in Africa*. Finance and Development. June. pp. 56–57.
22. Romer, P. M. (1986). *Increasing Returns and Long Run Growth*. Journal of Political Economy. Vol. 94. No. 5. pp. 1002–1037. Chicago, IL: The University of Chicago Press.
23. Romer, P. M. (1990). *Endogenous Technological Change*. Journal of Political Economy. Vol. 98. No. 5. p.71–102. Chicago, IL: The University of Chicago Press.
24. Romer, P. M. (1994). *The Origins of Endogenous Growth*. Journal of Economic Perspectives. Vol. 8. No. 1. p. American Economic Association: 3–22.
25. Sachs, D. J. (2002). *Resolving the Debt-Crisis of Low-Income Countries*. Brookings Papers on Economic Activity. Spring. pp. 257–287.
26. Sachs, J. (1989). *The Debt Overhang of Developing Countries*. in G. Calvo, R. Findlay, P. Kouri and J. Braga de Macedo, eds, *Debt Stabilization and Development: Essays in Memory of Carlos Diaz-Alejandro*. pp. 80–102. Oxford: Blackwell.
27. Sachs, J. And Williamson, J. (1986). *Managing the LDC Debt Crisis*. Brookings Papers on Economic Activity. No. 2, pp. 397–440.
28. Solow, R. M. (1956). *A contribution to the theory of economic growth*. The Quarterly Journal of Economics. Vol.70. No.1. p. 65–94. Cambridge, MA USA: The MIT Press.
29. Vreeland, J. (2002). *The Effect of IMF Programs on Labor*. World Development. Vol.30. Issue. 1. pp. 121–139. Great Britain: Elsevier Science Ltd.

### **E-Books**

1. Dang, G. and Pheng, L. S. (2015). *Infrastructure Investments in Developing Economies The Case of Vietnam*. Singapore: Springer. Retrieved 13.11.2015. from DOI 10.1007/978-981-287-248-7.

### **Online newspaper article**

1. North, J. 17. 04. 2000. *Sound the alarm: Economist James Stiglitz rips Washington's "market Bolsheviks"*. Barron's. 11.11.2015. from <http://www.barrons.com/articles/SB955757044395088744>

### **Legislative acts**

1. Charter of the United Nations. (1945). *Charter of the United Nations*. Retrieved 11.11.2015. from <http://www.un.org/en/sections/un-charter/chapter-i/index.html>
2. Declaration of Philadelphia (1944). *Declaration concerning the aims and purposes of the International Labour Organisation (DECLARATION OF PHILADELPHIA)*. Retrieved 12.11.2015. from [http://www.ilo.org/dyn/normlex/en/f?p=1000:62:0::NO:62:P62\\_LIST\\_ENTRIE\\_ID:2453907:NO#declaration](http://www.ilo.org/dyn/normlex/en/f?p=1000:62:0::NO:62:P62_LIST_ENTRIE_ID:2453907:NO#declaration)
3. Declaration on the Granting of Independence to Colonial Countries (1960). *Declaration on the Granting of Independence to Colonial Countries and Peoples Resolution 1514-XV.(1960)*. Retrieved 11.11.2015. from <http://www.un.org/en/decolonization/declaration.shtml>
4. GATS (1994,1995). *The General Agreement on Trade in Services (GATS)*. Retrieved 12.11.2015. from [https://www.wto.org/english/docs\\_e/legal\\_e/26-gats.pdf](https://www.wto.org/english/docs_e/legal_e/26-gats.pdf)
5. GATT (1947,1994). *The General Agreement on Tariffs and Trade (GATT)*. Retrieved 12.11.2015. from [https://www.wto.org/english/tratop\\_e/gatt\\_e/gatt\\_e.htm](https://www.wto.org/english/tratop_e/gatt_e/gatt_e.htm)
6. Resolution 43/47. (1988). *General Assembly Resolution 43/47 International Decade for the Eradication of Colonialism*. Retrieved 11.11.2015. from [http://www.un.org/en/ga/search/view\\_doc.asp?symbol=A/RES/43/47](http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/43/47)
7. Resolution 46/181- International Decade for the Eradication of Colonialism. (1991). *General Assembly Resolution 46/181- International Decade for the Eradication of Colonialism*. Retrieved 12.11.2015. from [http://www.un.org/en/ga/search/view\\_doc.asp?symbol=A/RES/46/181](http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/46/181)
8. Resolution 53/68- Implementation of the Declaration on the Granting of Independence to Colonial Countries and Peoples. (1999). *General Assembly Resolution 53/68- Implementation of the Declaration on the Granting of Independence to Colonial Countries and Peoples*. Retrieved 12.11.2015. from <http://www.un.org/en/ga/search/viewdoc.asp?symbol=A/RES/53/68>
9. Resolution A/RES/55/146 Second International Decade for the Eradication of Colonialism. (2001). *General Assembly Resolution A/RES/55/146 - Second International Decade for the Eradication of Colonialism*. New York: United Nation. Retrieved 12.11.2015. [http://www.un.org/en/ga/search/view\\_doc.asp?symbol=A/RES/55/146](http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/55/146)
10. Resolution A/RES/60/120 Second International Decade for the Eradication of Colonialism. (2005). *General Assembly Resolution A/RES/60/120- Second International Decade for the Eradication of Colonialism*. Retrieved 12.11.2015. from [http://www.un.org/en/ga/search/view\\_doc.asp?symbol=A/RES/60/120](http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/60/120)
11. Resolution A/RES/65/119- Third International Decade for the Eradication of Colonialism. (2011). *Resolution A/RES/65/119- Third International Decade for the Eradication of Colonialism*. Retrieved 12.11.2015. from [http://www.un.org/en/ga/search/view\\_doc.asp?symbol=A/RES/65/119](http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/65/119)
12. Resolution defining the three options for self-determination (1960). *General Assembly Resolution defining the three options for self-determination- Resolution 1541 (XV)*. Retrieved 11.11.2015. from [http://www.un.org/en/ga/search/view\\_doc.asp?symbol=A/RES/1541%28XV%29](http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/1541%28XV%29) (10.10.2015.).
13. Resolution establishing the Special Committee on Decolonization (1961). *General Assembly Resolution establishing the Special Committee on Decolonization Resolution 1654 (XVI)*. Retrieved 11.11.2015. from [http://www.un.org/en/ga/search/view\\_doc.asp?symbol=A/RES/1654%28XVI%29](http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/1654%28XVI%29)

14. Review of the implementation of General Assembly resolution 61/16 (2013). 68/1. *Review of the implementation of General Assembly resolution 61/16 on the strengthening of the Economic and Social Council*. 11.11.2015. from [http://www.un.org/ga/search/view\\_doc.asp?Symbol=A/RES/68/1](http://www.un.org/ga/search/view_doc.asp?Symbol=A/RES/68/1) TRIMs (1994,1995). *Agreement on Trade-Related Investment Measures (TRIMs)*. Retrieved 12.11.2015. from [https://www.wto.org/english/docs\\_e/legal\\_e/18-trims.pdf](https://www.wto.org/english/docs_e/legal_e/18-trims.pdf)
15. TRIPS (1994,1995). *The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)* Retrieved 12.11.2015. from [https://www.wto.org/english/docs\\_e/legal\\_e/27-trips.pdf](https://www.wto.org/english/docs_e/legal_e/27-trips.pdf)
16. WTO and the United Nations (1995). *Arrangements for Effective Cooperation with other Intergovernmental Organizations-Relations Between the WTO and the United Nations*. Retrieved 12.11.2015. from [https://www.wto.org/english/thewto\\_e/coher\\_e/wto\\_un\\_e.htm](https://www.wto.org/english/thewto_e/coher_e/wto_un_e.htm)

#### Online sources

1. International Labour Organization (1996-2012). *NORMLEX Information System on International Labour Standards, Convention*. Geneva: ILO. Retrieved 09.11.2015. from <http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12000:0::NO::>
2. International Labour Organization (1996-2015b). *2030 Development agenda: ILO Focus targets*. Geneva: ILO. Retrived 09.11.2015. from <http://www.ilo.org/global/topics/sdg-2030/targets/lang--en/index.htm>
3. International Labour Organization (1996-2015a). *Decent Work Agenda*. Geneva: ILO. Retrived 09.11.2015. from <http://www.ilo.org/global/about-the-ilo/decent-work-agenda/lang--en/index.htm>
4. International Labour Organization (2008). *A. Decent Employment and the Millennium Development Goals: Description and Analysis of a New Target*. Geneva: ILO. Retrived 09.11.2015. from <http://www.ilo.org/legacy/english/bureau/pardev/2010/kilm-5-2007-chap1aen.pdf>
5. International Monetary Fund (2015 c). *The Financial Sector Assessment Program (FSAP)*. Washington DC: IMF. Retrieved 09.11.2015. from <http://www.imf.org/external/np/exr/facts/fsap.htm>
6. International Monetary Fund (2015 a). *The IMF at a Glance*. Washington DC: IMF. Retrieved 09.11.2015. from <http://www.imf.org/external/np/exr/facts/glance.htm>
7. International Monetary Fund (2015 b). *The IMF and the World Bank Factsheet*. Washington DC: IMF. Retrieved 09.11.2015. from <https://www.imf.org/external/np/exr/facts/pdf/imfwb.pdf#page=2&zoom=auto,-17,264>
8. International Monetary Fund (2007). *Enhancing Collaboration: Joint Management Action Plan (Follow-Up to the Report of the External Review Committee on IMF-World Bank Collaboration)*. Washington DC: IMF. Retrieved 09.11.2015. from <http://www.imf.org/external/np/pp/2007/eng/092007.pdf>
9. International Monetary Fund (2010). *Implementation of the Joint Management Action Plan on Bank-Fund Collaboration*. Washington DC: IMF. Retrieved 09.11.2015. from <http://www.imf.org/external/np/pp/eng/2010/030310.pdf>
10. International Monetary Fund (2015 d). *Debt Relief Under the Heavily Indebted Poor Countries (HIPC) Initiative, Factsheet*. Washington DC: IMF. Retrieved 09.11.2015. from <http://www.imf.org/external/np/exr/facts/pdf/hipc.pdf>
11. International Monetary Fund (2015 e). *The Multilateral Debt Relief Initiative, Factsheet*. Washington DC: IMF. Retrieved 09.11.2015. from <http://www.imf.org/external/np/exr/facts/pdf/mdri.pdf>
12. International Monetary Fund (2015 f). *Poverty Reduction Strategies in IMF-supported Programs, Factsheet*. Washington DC: IMF. Retrieved 09.11.2015. from <http://www.imf.org/external/np/exr/facts/pdf/prsp.pdf>

13. International Monetary Fund and The World Bank (2015 g). *The Joint World Bank-IMF Debt Sustainability Framework for Low-Income Countries*. Washington DC: IMF. Retrieved 09.11.2015. from <http://www.imf.org/external/np/exr/facts/pdf/jdsf.pdf>
14. The World Trade Organization (2015a). *The Doha Round*. Washington DC: WTO. Retrived 09.11.2015. from [https://www.wto.org/english/tratop\\_e/dda\\_e/dda\\_e.htm#declaration](https://www.wto.org/english/tratop_e/dda_e/dda_e.htm#declaration)
15. The World Trade Organization (2015b). *Doha Development Agenda- Briefing Notes on Some Of The Main Issues of The Doha Round*. Washington DC: WTO. Retrived 09.11.2015. from [https://www.wto.org/english/tratop\\_e/dda\\_e/status\\_e/brief00\\_e.htm](https://www.wto.org/english/tratop_e/dda_e/status_e/brief00_e.htm)
16. The World Trade Organization (2015c). *Development: Trade and Development Committee- Special and Differential Treatment Provisions*. Washington DC: WTO. Retrived 09.11.2015. from <https://www.wto.org/english/tratope/devele/devspecia ldifferentialprovis ionse.htm>
17. The World Trade Organization (2015d). *Aid for Trade*. Washington DC: WTO. Retrived 09.11.2015. from [https://www.wto.org/english/tratop\\_e/devel\\_e/a 4t\\_e/aid 4trade\\_e.htm](https://www.wto.org/english/tratop_e/devel_e/a 4t_e/aid 4trade_e.htm)
18. UN (2015). *United Nations Millennium Development Goals, Background*. New York: United Nations. Retrieved 20.10.2015. from <http://www.un.org/millenniumgoals/bk gd.shtml>
19. UNDP (2015 b). *Introducing the 2030 Agenda for Sustainable Development*. New York: United Nations. Retrieved 20.10.2015. from <http://www.undp.org/content /dam/undp/library/corporate/brochure/SDGsBooklet WebEn.pdf>
20. MDG Group (2015). *The Millennium Development Goals Report 2015*. York: United Nations. Retrieved 20.10.2015. from [http://www.un.org/millennium goals/2015\\_MDG \\_ Report/pdf/MDG%202015%20rev%20%28July%201%29.pdf](http://www.un.org/millennium goals/2015_MDG _ Report/pdf/MDG%202015%20rev%20%28July%201%29.pdf)
21. UNDP (2015a). *Frequently Asked Questions, When and how did UNDP come into being?*. United Nation Deveopment Program. Retrived 09.11.2015. from [http://www.undp.org/content/undp/en/home/operations/about\\_us/frequently\\_askedqu estions/#being](http://www.undp.org/content/undp/en/home/operations/about_us/frequently_askedqu estions/#being)
22. United Nations Economic and Social Council -ECOSOC. (2015 a). *About ECOSOC, ECOSOC at a Glance*. York: The United Nations. Retrieved 10.11.2015. from [http://www.un.org/en/ecosoc/about/pdf/ecosoc\\_chart.pdf](http://www.un.org/en/ecosoc/about/pdf/ecosoc_chart.pdf)
23. United Nations Economic and Social Council -ECOSOC. (2015 b). *About ECOSOC*. New York: The United Nations. Retrieved 10.11.2015. from <http://www.un.org/en/ecosoc/about/ index.shtml>
24. United Nations Economic and Social Council -ECOSOC. (2015 c). *Further review of the Implementation of Resolution 61/16 on the strengthening of the Economic and Social Council*. New York: The United Nations. Retrieved 10.11.2015. from <http:// www.un.org/en/ecosoc /about/stren gtheningofecosoc.shtml>



## THE CHANGES OF POPULATION PYRAMID IN IRAN AND ITS IMPACT ON SUPPORTIVE COVERAGE OF SOCIAL SECURITY ORGANIZATION

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### **ABSTRACT**

*At the present time ,the status quo of the population in Iran in its best condition through the perspective of the interests of pension organizations. Approximately , 60%of the population is within the range of employment age; but the situation will change and the age trend of the population will move towards the middle age and aging .As a result, the age pyramid in Iran will witness the fundamental changes . Population estimates indicate the fast growth of the number of the aged people up to 2050 and the fundamental changes will happen in the population pyramid up to this date , and the size of the middle section of the pyramid, indicating the active population and the labor force, will be reduced . On the contrary, the volume of the upper part of the pyramid, indicating the aged population will be increased , and the peak age will reach 55-65 Years of age.*

*On the other hand , the number of the young population will decrease gradually; that is a major challenge for the pension organizations such as the social security organizations in the future. These population Changes should be taken into account immediately and the proper measures should be adopted to prevent the growing number of pensioners and to increase the resources in the years to come. Given the economic and social situation of the country, implementing the systematic and parametric change in the retirement schemes is not possible .As a matter of fact , the economic and living conditions of workers do not allow the rise in the rate of pension related deductions as well as the retirement age .Moreover , the society is not ready to accept any reforms in the retirement schemes.*

*Therefore , with regard to the newly established conditions in economy and society leading to the gradual arrival of many people into the labor market and significant rise in the number of active force , the social security organizations should take advantage of this opportunity. The existence of labor force and employment gives the organization a unique change to increase the number of insured and promote the coverage rate .*

**Keywords:** *population pyramid, Aging of Population, social security coverage*

### **1. INTRODUCTION**

Social security is one of the effective means to fulfill social justice. As an inter-generation investment, social security supports people against significant reduction of revenue due to disease, inability, old age, accident, death, etc. Thus, this organization has close association with the economy of society from macro and micro aspects and should provide relevant information of its activities. For effective management of plan, determination of proper policies of retirement and high supervision on these funds and responsiveness, we need reliable, relevant and transparent information (SafaeeFar, Fakhreddin, 2009). One of the most important information requirements of social security organization is different population information as active population, population old age, changes in population pyramid, etc. and it is provided in definite times and one of the discussions is old age of population. Population **ageing** is a major issue in present decade. Most of developed countries are faced with population **ageing** and most of developing countries are on the verge of population **ageing**. Other developing countries consist of young population. Like most of developing countries, with the continuous

reduction of fertility and increase of life expectancy, Iran population has experience major changes in age structure. However, population ageing is not a major issue in this country, this issue has received much attention from population, social and economic fields. The changes have important economic and social aspects in terms of policy making for managers of social security organization plan.

## **2 .SIGNIFICANCE OF STUDY**

Generally, effective factors on social security fund performance are considered in three groups of basic factors (economic, population and plan factors). In this study, they are evaluated in the form of population factors as transition of young age to old age with great effect on the future of social security fund. The study of this process is of great importance from some dimensions in social security fund. Some of the items are as follows:

- 1- In each of age structure transition stages, as which age groups are in majority, the resources of social security fund are affected. The increase or reduction of active population-increase or reduction of old age and pension receivers.
- 2- Population age structure defines the volume and percent of labor force supply. The changes of workers and labor force are effective factors on growth of social security organization resources.
- 3- The main problem of input and output imbalance of fund due to the increase of retired and their wage or reduction of growth of workers and users of fund.
- 4- Increase of the old age and its impact on health costs of social security fund

## **3. RESULTS OF STUDY**

The population ageing reduces relative active force and tax payers and insurance premium payers are reduced. This phenomenon increases the house holding load of elderly (the ratio of elderly to working population) and increases the number of elderly in need of support and pension receivers are also increased ( Varaste, Shirin, 2012). The changes trend in population pyramid and the ratios of supportive coverage of social security organization by presenting a proper model to predict the effects of changes in population pyramid on supportive coverage of social security organization and economic stability of fund can be a good guidance for planners and policy makers for long-term planning. This paper is a useful tool for social security organization and other retirement funds and tax organizations.

### **3.1. Study hypotheses**

This study tests the following hypothesis:

Main hypothesis: Population ageing has negative impact on supportive coverage of social security organization.

### **3.2. Study methodology**

The study method is applied in terms of purpose and descriptive, analytic and document based on method. For data collection of review of literature and description sections, library method like the study of books, journals, theses, translation and summary of papers are used. The required data of this paper are extracted from data World Bank organization<sup>2</sup> and data UN organization<sup>3</sup>. The main source of predictions, census report and population estimation is Iran statistics center and World Bank. By excel, spectrum software, the results are extracted.

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<sup>2</sup> data.worldbank.org

<sup>3</sup> data.un.org



#### 4. THE THEORETICAL BASICS OF STUDY AND EXPLANATION OF EXISTING CONDITION AND FUTURISTIC PLAN OF POPULATION PYRAMID STRUCTURE

According to statistical calendar of social security organization, the number of main insured of social security organization was 13344498 in the late 2014. At the same time, the number of main pension receivers of social security was 2791802. Based on the calculations, supportive coverage ratio of social security organization (The number of main insured to the number of main pension receivers) is 4.77%. Based on the study of 5 past years, these results are achieved.

Supportive coverage ratio	Increase or reduction
5.203161745	Decreasing
5.186796306	Decreasing
5.147600043	Decreasing
4.974593854	Decreasing
4.779886969	Decreasing

Based on the past trend, the supportive coverage of social security organization is decreasing mildly and the decreasing trend in 2028 and later is sharply and since 2031 enters a critical stage. The decreasing trend of supportive coverage of organization is reduced with relative reliability.

##### 4.1. Charts

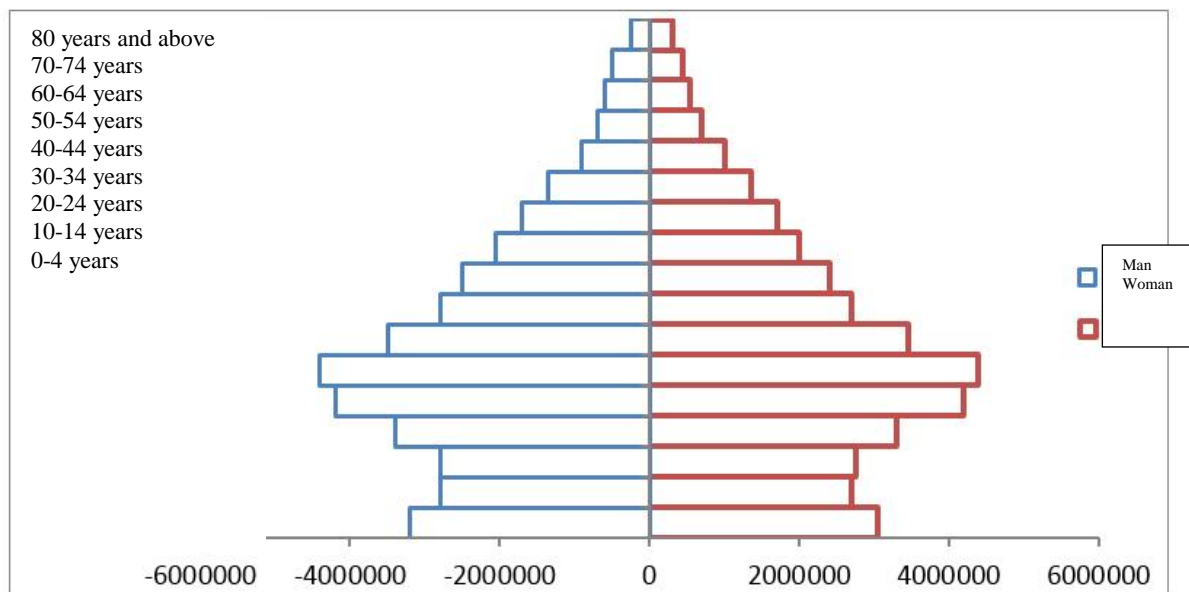
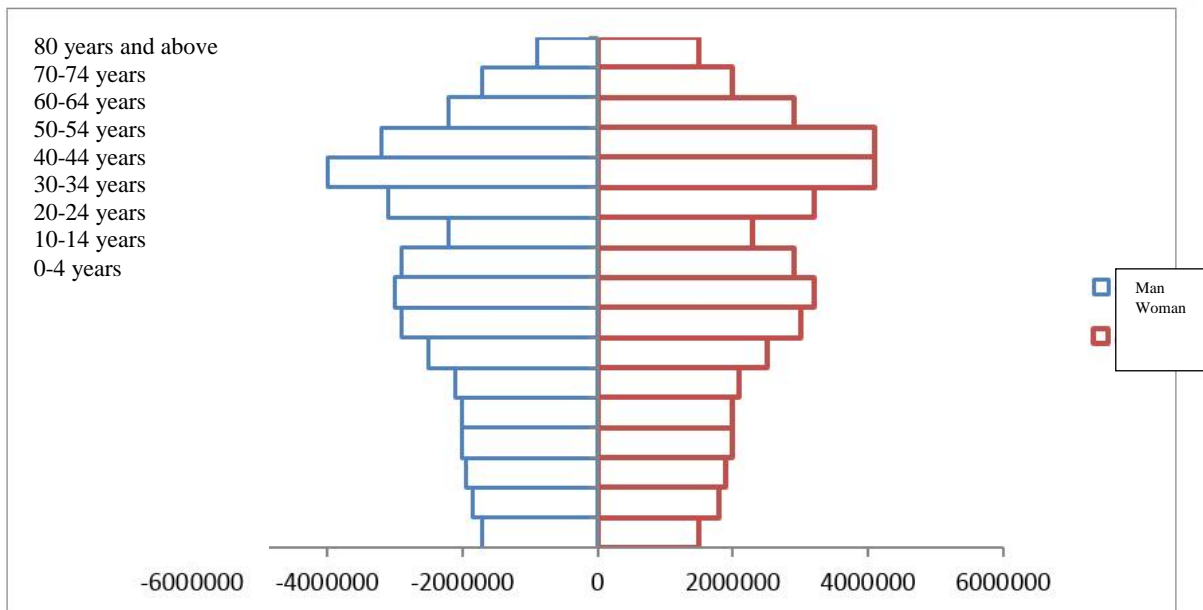
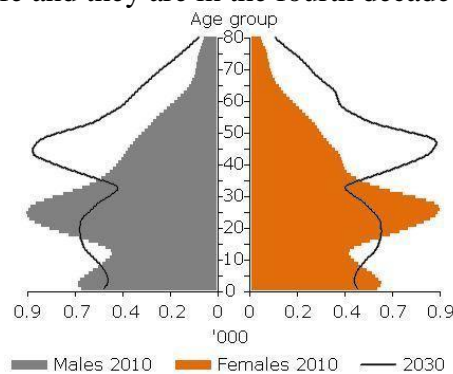


Fig. 1 Population pyramid chart in 2011



*Fig. 2 Population pyramid chart in 2051*

Iran population distribution has a serious protrusion in 2010 as it is regarding the people in the second decade of their life and they are in the fourth decade in 2030.



*Fig. 3 – Age groups*

Based on the data of Iran age group in 2006, the population of age groups 15-29 was the major population volume. The population peak age was 20-24 years. This model is changed in 2046 significantly as the age peak is 60-64 years. The young population of country is reduced gradually.

## 5. CONCLUSION

The studies regarding the changes in population pyramid of Iran are mostly regarding the prediction of future and it is based on statistical predictions as without any mistake like other predictions. In long-term predictions with a few changes in variables, the results are deviated significantly. Abasi Shovazi referred to some reasons as increase of urbanization, increase of literacy of women, increased marriage age, etc. in future and considered increase of fertility impossible and predicted reduced fertility (Abbasi-Shovazi, 2009). It seems that changes of population pyramid and population ageing are unavoidable. By reduction of active population of country and increase of elderly, the following results are achieved:

Main hypothesis: Population ageing has negative impact on supportive coverage of social security organization. The main hypothesis is supported. Based on the computations, the

supportive coverage of social security organization is decreasing mildly and this trend is continued to 2028 and since 2028, the decreasing is sharp and it enters a critical stage since 2031. The decreasing trend of supportive coverage of organization is decreased with relative assurance. Finally, according to Roghanizade, Mostafa, based on the review of existing condition and brief analysis of problems of retirement organizations, the structure should be reformed. The reformations of social security organization should be on priority for all people. According to Ole Beier Sørensen (2007), reformation of retirement systems is of great importance and most of international studies regarding population ageing focus on reformation of retirement systems and show that the increase of elderly and life can increase the costs of retirement plans and the long-term financial sustainability is unavoidable.

The mentioned reforms are not only restricted to retirement systems. The main focus is on reformation of retirement systems. Its mutual effects cover the design of retirement system, social security, tax and labor market policies. The behavior and decisions regarding overcoming the changes of population pyramid of Iran population and the increase of the number of retired is not only affected different types of retirement plans but also required a wide range of structures and policies at national level. As most of the discussions are based on retirement systems, a little attention is given to the effects of ageing of population on labor force, its result on labor demand. The reduction of workers in labor force with the changes in population pyramid and increase of elderly can reduce insured workers and increase the problem of providing facilities to provide a big group of future pension receivers. Thus, it seems that reforms of social security and retirement system should be with the support of participation in labor market and support of design growth and population policies.

#### **Systematic reforms (Long-term)**

In systematic reforms, besides the parameters adjusting, system nature is changed, it means that retirement plans DC-FF, NDC and multi-layer systems can be replaced with current retirement plans (DB-PAYG) and due to the creation of various socio-economic infrastructures and funding can not be operationalized in short and mid-term.

#### **Parametric reforms (Long-term)**

In these reforms, it is attempted to adjust the parameters based on the changes of social and economic factors, without the change of system and reduce the future commitment. One of the most important adjustment is the increase of retirement age, increase of premium, increase of the basic years for retirement pension and increase of service years to qualify for retirement conditions. Some reforms create resistance in social structure and lead to social outcomes. For example, we can refer to the increase of retirement deficiency and this reduces the wage of workers and social dissatisfaction. Based on the increase of life expectancy in close future, in a long-term plan, we are obliged to perform some parameter reforms.

#### **The changes in processes improvement of methods and procedures (Mid-term)**

The improvement of processes includes optimization and improvement of existing activities, review of structures and definition of new processes to improve the quality of performance and customer centralization. The rules reforms based on the structure, strategy and organization size and its reliance on instructions to control executive units performance is one of the effective factors on improvement of insurance organization performance.

- Finally, based on socio-economic conditions of our country, parametric and systematic changes can not be occurred in retirement plans, it means that with the economic condition of workers, the retirement deficiency rate is not increased and also retirement age is not increased and it seems that the insured community and Islamic council parliament are not prepared for basic reforms in retirement plans. We should avoid parametric and systematic changes in short-term and by creating structural changes in relevant fields, we redefine process (identification, observation, adaptation and support) of all pension receivers and identification of insurance escape and new issues of insurance.

The example of short-term measurements:

Avoiding early retirement and escape from insurance premium by some of employers via:

- 1- Not stating the real wage, 2- No deduction of insurance premium of the benefits of insurance premium deficiency (World Bank states that the ratio of retired wage to employed or replacement rate in Iran is high. Providing such replacement rates with high premium insurance rates is not possible), 3- Avoiding hiding labor force by some employers.

## LITERATURE

1. Hosseini, Hatam. 2002. An introduction to socio-economic demography and Family control. Hamedan. Bualisina University.
2. Zanjani, Habibollah et al., 2010. The prediction results of Iran population to horizon 2026. Tehran. Iran statistics center.
3. Varaste, Shirin. 2012. The analysis of the impact of population ageing on society saving in a selected set of developing countries.
4. Safayifar, Fakhroldin et al., 2009. Evaluation of the impact of accounting standard of retirement benefits on decisions of users of financial statements of social security organization.
5. Lahsayizade, Abdolali. 1998. Population age structure. Navid Shiraz population. Shiraz.
6. Iran statistics center. 2006. The results of general people and house census during 1956-2006. Iran statistics center. Tehran.
7. Mirzayi, Mohamamad et al., 2003. The analysis of population challenges of Iran and its outcomes. Commission of population and social challenges. High council of cultural revolution. Tehran.
8. Mirzayi, Mohamamad et al., 2006. The report of population and development of country in Iran. Project of population and development of Tehran University. Tehran.
9. Moshfegh, Mahmood et al., Age transition in Iran: Population age changes and social-population policy making.
10. Deputy of planning and strategic supervision of president. The report of macro documents of fifth plan of development (population). Office of economic planning. Day 2009.
11. Abbasi-Shavazi, M.J. McDonald, P. Hossein Chavoshi, M. 2009, The Fertility Transition in Iran, Springer Press.
12. Sørensen, Ole Beier & Buhl, Ole (2007), "The interplay of retirement systems, social security, labour market policies and taxation in shaping retirement patterns", Technical Commission on Old-age, Invalidity and Survivors' Insurance World Social Security Forum, Moscow, 10-15 September 2007, ISSA Technical Report 11. <http://www.un.org/esa/population/unpop.htm>
13. United Nations (2011), *"World Population Prospects, the 2010 Revision"*.
14. United Nations, Department of Economic and Social Affairs, Population Division (2013), *World Population Prospects: The 2012 Revision*, New York.

## GRAIN PRODUCTION AND PROCESSING IN POLAND AT THE BEGINNING OF THE XXI CENTURY

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### ABSTRACT

*This paper examines share price of the companies listed on the WIG-SPOŻYWCZY and their fair value between 2006-2015. Data from 2006 to 2015 were collected from the Stooq.pl (Polish portal of shares). Two hypotheses are tested: (1) value of the shares based on the market price; (2) value of the shares as the fair value of shares. Moreover, the financial condition of several companies with respect to the sector was examined with the selected financial ratios. In addition, the author expressed his view on the opportunities of the property companies market's WIG-SPOŻYWCZY in 2015-2018.*

**Keywords:** food sector, financial condition, profitability, fair value.

### 1. INTRODUCTION

Grains are widely cultivated crops, which poses many problems associated with the organisation of production, dissemination of technological and biological development as well as the organisation of purchasing and processing. Due to the use values and durability, grains constitute an important component of food security of each country.

Under the influence of market needs and profitability of production, the area of grain cultivation as well as yields and harvest is changing. The place and role of grains in agriculture and the Polish economy are also changing.

Grains constitute a crucial component of agriculture and the Polish economy because:

- they are cultivated by 89.5% of farms, and the average area of grain production is 5.90 ha (in 2010) (GUS, 2011, pp. 38),
- they cover almost three quarters of the ground cultivation area; in 2000-2013, the area of grain cultivation decreased from 8814 thousand ha to 7479 thousand ha, that is by 1335 thousand ha, i.e. by 15.1%. In the same period, the percentage of grains in the structure of sowing increased from 71.0 to 73.8%) (GUS, 2009, pp. 197; GUS 2014, p. 187),
- they constitute an essential component of crop rotation (there are difficulties in finding good sites for such a large percentage of grains),
- they constitute (GUS, 2013, pp. 34) 19.1% of global agricultural production and 35.5% of plant production as well as 13.1% of agricultural commercial production and 29.1% of plant production (GUS, 2014, pp. 178-180), (while in 2000, they respectively represented: 18.0%, 33.8%, 12.0% and 32.0%) (GUS, 2011, p. 459-460),
- they are an important source of nutrients, a basis of the food pyramid as well as a basic component of the human food security,
- they are a major component of industrial feed used in feeding livestock as well as an element of the intensification of the livestock production (Kapusta, 2012, p. 23,
- they involve a significant part of labour resources in agriculture and provide workers with revenues.

## 2. AIM, MATERIAL AND METHODS

The aim of the conducted research was to:

- a) analyse the trends of changes in the volumes of production and the position of grains in agriculture and the Polish economy in 2000-2013;
- b) perform the balances of grains and well as determine self-sufficiency of Poland in terms of this product, distinguishing technical and economic self-sufficiency,
- c) characterise the trend of changes in the intended purpose of grains,
- d) assess the efficiency of the grain-milling industry (including pasta industry).

In order to determine the self-sufficiency of Poland in grain production, technical and economic indicators were used (Kapusta 2012, pp. 263-264), and the self-sufficiency is understood as a balance of production and domestic consumption – in technical indicators, and in case of economic indicators, it is a balance, in terms of value, of trade with grain products.

The development is based on secondary sources of knowledge, such as: consistent scientific publications, reports and statistical materials.

The collected material was developed and interpreted by using the following methods: the comparative method in the vertical and horizontal form (Kapusta 1976, pp. 11-12; Stachak 2003, pp. 213-216), as well as the statistical one (Stachak 1997, pp. 132-133).

The obtained research results were presented with the use of tabular and graphic techniques in connection with the language description.

The paper also includes the methods of financial (financial ratios) and economic analyses related to the examination of joint-stock companies. These companies were analysed and limited only to the food sector companies (grain production) quoted on the Warsaw Stock Exchange in Poland.

*The obtained results were presented in a tabular form in connection with the language description.*

## 3. RESULTS AND DISCUSSION

### A) Balance of grains and self-sufficiency

The balance of grains in Poland has always been tight. In general, Poland has been a regular importer of consumption grains (due to insufficient production of high quality grains) as well as fodder (due to the systematic increase in the consumption of grains for animal feed).

In the balance of grains, there are two different situations; relatively stable internal consumption is accompanied by high volatility on the production side.

A new situation in the balance of grains took place in the twenty-first century, when the fluctuations in production and domestic consumption occurred; large fluctuations of production are accompanied by corresponding fluctuations in import, as a result of which, Poland has become again a net importer of grains for several years (Table 1-2).

In Poland, grains are used (e.g. in 2000/01 to 2012/13) as follows: feed – 60.5%, consumption – 22.2%, sowing (reproduction) – 7.2%, industrial processing – 4.5%, other (losses and defects) – 3.7%. At the same time, 15,676 thousand tonnes of grains were exported, and 16,530 thousand tonnes were imported, that is about 854 thousand tonnes more. However, variable trends in the balance of external trade of grains have occurred in different years. During the period of the Polish membership in the European Union, the foreign trade volumes of grains (both export and import) have increased.

*Table 1: Balance of grain in total in years 2000/01 – 2012/13 - '000 tons and mm EUR,*

<sup>a</sup>including grain mixes and grains for processed products, <sup>b</sup>decrease (+) or increase (-) in stock in industrial processing and trade; together with stock in farms, <sup>c</sup>without milling of grain.

(Source: Statistical Yearbook of Agriculture and Rural Areas 2005, CSO, Warsaw 2005, pp. 385-386; Statistical Yearbook of Agriculture 2009, CSO, Warsaw 2009, pp. 299-300; 2010, pp. 297-298; 2014, pp. 347-348; Statistical Yearbook of the Republic of Poland 2011, CSO, Warsaw 2011, p. 468; Rynek Zbóż, IERiGŻ, ARR, MRiRW, 2009 No. 37, p. 24; 2011 No. 41, p. 1, 22; 2015 No. 48, p. 27.)

Specification	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Resource	23935	26265	26807	23566	28015	26722
Production	21344	25540	24876	21464	27220	24900
Imports	1876	725	603	709	795	724
decrease in stock <sup>b</sup>	715	-	1328	1393	-	1098
Domestic consumption	23848	26169	25631	23448	27404	25447
- sowing	1928	1798	1751	1778	1769	1704
- feeding	14212	15083	15812	13980	14003	15506
- consumption	5746	5747	5746	5772	5716	5686
industrial consumption <sup>c</sup>	913	1083	1151	1081	1141	1205
- losses	1049	1341	1171	837	1165	1135
Exports	87	96	1176	118	611	1275
Increase in stock <sup>b</sup>	-	1117	-	-	3610	211
Difference (E-I)	-1789	-629	573	-591	-184	551
\$s	89.5	97.6	97.1	91.5	99.3	97.9
Share of consumption in production (%)	26.9	22.5	23.1	23.6	21.0	22.8
Share of imports in consumption (%)	32.6	12.6	10.5	12.3	13.9	12.7
Share of exports in consumption	0.4	0.4	4.7	0.5	2.2	5.1
(E-I)Difference ('000 EUR)	.	.	.	.	128.9	332.6

The performed balance of grains showed that:

1) there are large fluctuations of grain production resulting mainly from the variability of yields and the cultivation area,

2) national consumption shows high stability, despite the transfers between different directions of consumption, and so:

a) destination of grains for consumption is systematically decreasing as a result of the reducing number of population as well as the slow decline in consumption per one inhabitant (e.g. in the season 2014/2015, the consumption is estimated at about 107 kg per one person in the flour equivalent or 132.5 kg per grain). A grain of wheat is primarily devoted for food purposes and it amounts to 4.5 million tonnes, i.e. about 46% of harvest and 1.5 million tonnes of rye, i.e. about 40% of harvest. Consumption of other types of grains constitutes small amounts,

*Table2: Balance of grain in total in years 2000/01 – 2012/13 - '000 tons and mm EUR,*

<sup>a</sup>including grain mixes and grains for processed products, <sup>b</sup>decrease (+) or increase (-) in stock in industrial processing and trade; together with stock in farms, <sup>c</sup>without milling of grain.

(Source: Statistical Yearbook of Agriculture and Rural Areas 2005, CSO, Warsaw 2005, pp. 385-386; Statistical Yearbook of Agriculture 2009, CSO, Warsaw 2009, pp. 299-300; 2010, pp. 297-298; 2014, pp. 347-348; Statistical Yearbook of the Republic of Poland 2011, CSO, Warsaw 2011, p. 468; Rynek Zbóż, IERiGŻ, ARR, MRiRW, 2009 No. 37, p. 24; 2011 No. 41, p. 1, 22; 2015 No. 48, p. 27.)

Specification	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Resource	25698	26887	27333	29493	26926	26588	26959
Production	20454	25318	25738	28020	25088	24255	24413
Imports	2500	1549	1528	1395	1416	1705	1005
decrease in stock <sup>b</sup>	2744	20	67	78	422	628	1541
Domestic consumption	24803	26009	25161	25318	24945	24982	23621
sowing	1711	1737	1751	1751	1712	1711	1695
feeding	15535	15003	15241	15119	14689	14662	13960
consumption	5282	5247	5187	5160	5222	5309	5047
industrial consumption <sup>c</sup>	1315	1380	1550	2110	2075	2120	1904
losses	950	1015	1052	1178	1247	1180	1015
Exports	895	878	2172	2406	1747	1248	2967
Increase in stock <sup>b</sup>	-	1627	380	1769	234	358	371
Difference	-1605	-671	644	1011	331	-457	1962
Ss	82.5	97.3	102.3	110.7	100.6	97.1	103.4
Share of consumption in production (%)	25.8	20.7	20.2	18.4	20.8	21.9	20.7
Share of imports in consumption (%)	47.3	29.5	28.5	27.0	27.1	32.1	19.9
Share of exports in consumption	16.9	3.5	8.4	8.6	7.0	5.1	12.2
Difference ('000 EUR)	-48.1	53.0	282.1	415.0	323.9	257.0	1150.3

b) percentage of consumption (in %) in production shows large fluctuations (two times, it fluctuates around 25% and once below 20%), recent years constitute the amounts around 20%,

c) destination of grains for sowing, as a result of reducing the area of their cultivation and changes in sowing per 1 ha, is systematically decreasing,

d) industrial consumption (in spirits, brewery and starch industries) shows an upward trend; a phenomenon of great replacement of potatoes in alcohol and bioethanol production with grains occurs, and beer production (decrease in 2009 and 2010) as well as starch production are increasing,

e) destination of grains for feeding purposes, which results from, among others, changes in technology and intensity of animal nutrition, is systematically increasing; more and more grains are used for production of industrial feed mixes, however, the stabilisation of feeding with raw grains occurs,

f) losses and defects of grains are still of the high level (3.5-4.5%), which results from the faulty storage technology,

g) occurred exports show large fluctuations with the upward trend,



- h) technical self-sufficiency indicators show large fluctuations and justify the need for maintaining stocks of grains,  
i) economic self-sufficiency is quite preferably formed mainly due to the high exports of processed products.

All in all, it should be stated that the grain market in Poland is badly organised, and as a consequence of it, our country is an importer instead of being a net exporter of grains. It is an incomprehensible fact for consumers that there are difficulties in obtaining good quality grains for food purposes while earmarking about 20% of the grain production for consumption in recent years.

In addition, there are large fluctuations in grain prices, which reflects in the products derived from them: food and feed ones.

#### B) Grain processing for food purposes and its efficiency

We can distinguish primary and secondary processing. In the primary processing, semi-finished products are created (flour, groats), which constitute an enriched raw material in the secondary processing (production: bread, pasta, confectionery, preparation of meals). The entities of this processing are subject to restructuring and concentration. The number of business entities in the processing, and especially these of small and medium daily processing, is decreasing. As a result of investment expenses, the modernisation of processing plants is made in a way that they match up to the technologies of plants from the old countries (EU-15) of the European Union. The investment process is systematically conducted, and the rate of investment is satisfactory.

Only a part of the grain intended for food purposes is directed to the milling in the grain and milling industry, however, it is a steadily increasing part (Table 3).

*Table 3: Industrial consumption of grain in years 2001-2013<sup>a</sup>* without groats and meal from other grains which were not classified elsewhere, their production in recent years was disproportionately large in comparison with the previous years. – without groats from other grain not elsewhere specified.  
(Source: Rynek Zbóż, MRiRW, ARR, IERiGŻ, 2010 No. 39, p. 20; 2015 No. 48, p. 23. Own calculations)

Year	Milling		Production					
	'000 tons	% of consumption	wheat flour	rye flour	pasta	groats	fresh bakery	sweet bakery
2001	3340	58.1	2117	259	106.	73.1	1653	198.8
2002	3540	61.6	2254	262	5	80.1	1547	211.8
2003	3540	65.4	2418	261	124.	77.9	1556	236.5
2004	3760	61.9	2285	255	1	79.1	1532	318.4
2005	3760	67.2	2488	245	123.	92.0	1549	329.8
2006	3570	65.1	2543	241	2	112.6	1552	360.8
2007	3570	70.0	2400	234	134.	111.6	1523	417.7
2008	3840	61.0	2093	218	9	103.2	1684	388.9
2009	3840	66.7	2229	218	132.	<sup>a</sup>	1663	432.3
2010	3900	66.3	2230	201	1	108.4	1675	396.1
2011	3900	65.1	2201	214	146.	<sup>a</sup>	1601	390.1
2012	3709	64.2	2207	219	2	110.0	1675	402.1
2013	3700	68.3	2230	221	155.	<sup>a</sup>	1745	402.2
2014	3200				3	107.6		
2015	3200				153.	<sup>a</sup>		
2016	0				1	96.4 <sup>a</sup>		

200	344				181.	109.8		
9	0				6	<sup>a</sup>		
201	342				177.			
0	0				2			
201	340				182.			
1	0				9			
201	341				175.			
2	0				4			
201	344				175.			
3	5				8			

The performed analysis showed that:

a) *there are large fluctuations in the industrial processing of grains caused by the market situation of grain products (domestic and foreign ones). Consequently, only a part of the industrial production potential is used in production, which does not remain without the impact on its financial results,*

b) percentage of the industrially processed consumption grains is increasing,

c) situation in the production of wheat flour is fairly stable, however, the production of rye flour is systematically decreasing,

d) production of pasta, groats, cereals and sweet bakery is dynamically increasing, however, an increase of the fresh bread production is small.

For decades, the process of reducing the level of consumption of grain products (in the grain equivalent) by the inhabitants of our country has continued. The structure of consumption of various grain products, at their fairly stable share in the total expenditure in households, is changing (Kapusta 2012, pp. 112-113).

#### C) Economic efficiency of companies of the grain and milling industry

For many years, all departments of grain processing have achieved positive financial results, and in all sectors, there have been the relatively high profitability of sales and return on equity. The net return ranges from 2.45 (2012) to 4.96 (2010).

*Table 4: Financial results of the grain and milling industry (including pasta industry), <sup>a</sup> net profit plus depreciation, <sup>b</sup> sum of gross profit, depreciation and financial costs.*

*(Source: Rynek Zbóż 2012 No. 42, p. 21; 2015 No. 48, p. 25)*

Meters	Year				
	2009	2010	2011	2012	2013
Profitability in% of revenues					
- gross profit	4.81	5.55	3.54	2.79	3.52
- net profit	4.05	4.96	3.07	2.45	3.05
- capital formation <sup>a</sup>	7.45	7.95	5.56	4.95	5.62
- operating surplus <sup>b</sup>	9.69	9.75	7.53	6.92	7.49
Financial costs of in% of revenues	1.48	1.20	1.50	1.64	1.40
	.	16.07	10.02	8.13	10.23
ROE [return on equity] (in %)	1.10	1.15	1.25	1.16	1.23
Current liquidity ratio	1.03	1.21	1.50	1.19	1.04
Investment rate					

A high participation of the companies generating profits both in the total number of entities and revenues of individual lines of business shows good economic and financial results of various departments of the grain processing. The positive financial result was obtained by 80% of

entities in the grain milling to over 90% in the animal feed production, and the revenues of profitable companies amounted to 91% of sales in the milling and production of fresh bread to 98% in production of pasta (Rynek Zbóż, 2015, pp. 25).

#### 4. ANALYSIS AND VALUATION OF THE FOOD SECTOR COMPANIES QUOTED ON THE WARSAW STOCK EXCHANGE (WSE) IN POLAND.

The WIG-SPOŻYW index, presented in Figure 1, shows that from 2007 to December of 2008, the food sector's companies in Poland showed a downward trend in their values.

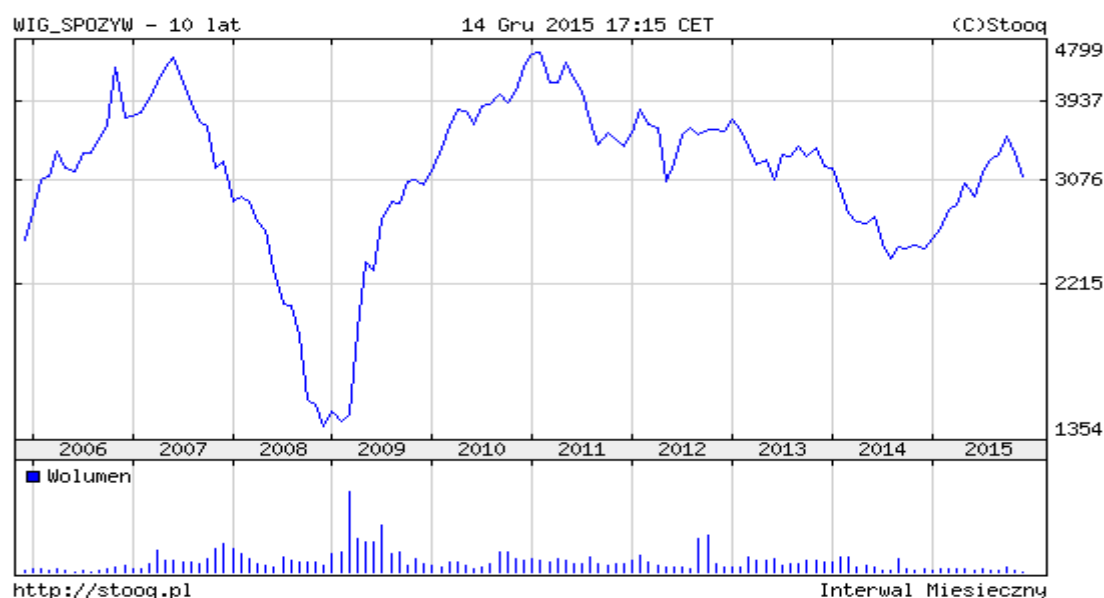


Figure 1. WIG-SPOŻYW in the period from 01.2006 to 10.2015((data of the stooq.pl).

However, since the first quarter of 2009, it has been possible to notice a significant upward trend, in which the augmentation and consolidation at the level of 3,699 points on the index take place. The values reported on October 27, 2015 reflect the upward trend and confirm it. However, the market values do not reflect their fair value (Borowski, 2014, pp. 1-5, Jajuga, 1996, pp. 34-57).

In the food sector, we can see one company, which reported its maximum on 27 January 2015, and that is AGROWILL. While the other companies did not show its maximum value, and even fair value, though they can show the net profit and the good financial condition. Some companies were overvalued by over 90%-97%. These companies are AGROTON and KSGAGRO. Only AGROWILL is trying to remain to be a flagship company, and recover its value of the previous years (Table 5).

Table 5: The food sector's companies quoted on the Warsaw Stock Exchange in Poland as of 27.10.2015 (own development based on the data of the Warsaw Stock Exchange, data of the Bankier.pl)

Name	Average rating	rating	Current price PLN	Maximum price PLN from the beginning of the stock exchange quotation
AGROTON	2.0/5.0	No data	1.26	41.39
AGROWILL	5.0/5.0	AAA	0.97	1.16
KSGAGRO	3.0/5.0	D	1.12	27.80

In table 6, the most important ratios presenting the financial condition of the food sector's companies were presented. In 3 surveyed companies, the generated profit per share was reported in 1 company. It shows that the food companies prosper properly on the financial market and are able to record higher or lower profits (Parvi, 2014, pp. 262-267).

The price to the operating earnings shows the losses of the company, and this state of affairs was reported in 1 examined stock exchange quoted companies (Damodaran, 2012, pp. 45-46, Pastusiak, 2010, pp. 34-46, Jędrzejczak, 2011, pp. 133-138). KSGAGRO generated negative digit ratio under one.

In contrast, analysing P/BV and P/P, it should be noticed that both the price to the book value and the price to profit demonstrate that nine companies operate excellently on the market and have a value of c. 1.0 and above, and the best of them is AGROTON. Other companies do not differ significantly from average values (Parvi, 2014, pp. 179-185, Veale, 2001, pp. 88-125).

*Table 6: Technical evaluation of the construction sector's companies quoted on the Warsaw Stock Exchange in Poland as of 30.06.2015 (own development based on the financial data of the companies quoted on the Warsaw Stock Exchange in Poland)*

<b>Name</b>	<b>P/OE (price/ operating earnings)</b>	<b>P/BV (price/ book value)</b>	<b>P/P (price/ profit)</b>	<b>Profit per share</b>
AGROTON	No data	No data	No data	No data
AGROWILL	14.06	751.21	0.98	No data
KSGAGRO	0.53	-0.33	0.21	(EUR) 0.170

In table 7, the studies concerning, among others, the net profit, depreciation, EBITDA and assets of the construction sector's companies and the book value per share are presented. According to the obtained values, it is clear that only AGROWILL and KSGAGRO showed a profit, which was confirmed by the previous ratios included in the table 6. Other companies showed a substantial profit generated in the third quarter of 2015.

*Table 7: The technical evaluation of the construction sector's companies quoted on the Warsaw Stock Exchange in Poland as of 30.06.2015 (own development based on the financial data of the companies quoted on the Warsaw Stock Exchange in Poland)*

<b>Name</b>	<b>Net profit (net loss) in thousands PLN</b>	<b>Depreciation in thousands PLN</b>	<b>EBITDA in thousands PLN</b>	<b>Assets in thousands PLN</b>	<b>Book value per share in PLN</b>
AGROTON	No data	No data	No data	No data	No data
AGROWILL	2280	0	2718	128427	No data
KSGAGRO	(EUR) 2539	(EUR) 894	(EUR) 6193	76365	-1.553

The book value per share shows that companies are overvalued, but we have no data (AGROTON, AGROWILL), and in case of two companies. However, it is important not to follow this opinion because the values are only the book values value (Froehlich, 2013, pp. 67-75), and the calculation of them is purely mathematical and financial. In case of using the economic attitude and interpretation, it would occur that the companies do not have the fair value (table 5) (Parvi, 2014, pp. 168-177, Thompson, 2008, pp. 52-54, Pierce, 2004, pp. 110-115).

The profitability of the equity as well as the profitability of assets is not shown by AGROWILL. Therefore, according to the presented study, it is possible to observe that the flagship food (grain production) concerns have the profitability and they are not threatened by any disturbance of the financial liquidity (it is not full year) (Table 8).

*TABLE 8: The food sector's companies quoted on the Warsaw Stock Exchange in Poland as of 27.10.2015 (own development based on the financial data of the companies quoted on the Warsaw Stock Exchange in Poland)*

<b>Name</b>	<b>ROE</b>	<b>ROA</b>
AGROTON	No data	No data
AGROWILL	-10.22	-4.49
KSGAGRO	No data	No data

Currently, the value of companies significantly deviates from the maximum value achieved a few years ago. The only exception is AGROWILL, which achieved the maximum value in its history. Other companies have the value less than 90%-95% of the maximum one (table 9).

*Table 9: The food sector's companies quoted on the Warsaw Stock Exchange in Poland as of 27.10.2015 (own development based on the financial data of the companies quoted on the Warsaw Stock Exchange in Poland)*

<b>Name</b>	<b>Current value</b>	<b>Maximum value</b>	<b>Fair value</b>	<b>Deviation from the fair value in PLN</b>
AGROTON	1.26	41.39	25.80	24.54
AGROWILL	0.97	1.16	1.15	1.18
KSGAGRO	1.12	27.80	8.50	7.38

However, the fair value which should be reflected by the share prices of the examined companies significantly differs from the calculated value, which was presented in the table 9. In some cases, it is even 90% of the current value. However, the fair value is significantly higher than the current value of the examined companies, and in one company, AGROWILL, it is only similar.

## 5. CONCLUSION

Grains occupy an important position in the economy of our country: a high share in the sowing structure, agricultural global production and plant production. Due to nutritional values as well as relatively low sensitivity to transport and storage, they are used for a variety of purposes, and, especially, they play a crucial role in shaping food security.

The grain economy in Poland shows: a defective structure of cultivated grains, although it is systematically changing, large fluctuations in yields, which also results in high fluctuations of harvest that is accompanied by relatively stabilised internal consumption.

Contrary to the common opinion, the grain balance poorly depends on consumption for food purposes, and mainly on animal feed consumption. Due to this shift in the production structure for feed grains (corn, grain mixes), the direction of changes should be considered as desirable. In spite of the fact that 22% of grain harvest is intended for food purposes, there are difficulties in obtaining good quality seeds for this purpose, which is a main cause of their import for food purposes. This fact emphasises the need to regulate the grain economy and to extend the specialisation of farms in the production of various types of grains within the framework of long-term cooperation with processors.

All in all, it should be stated that the grain market in Poland is badly organised, and as a consequence of it, our country is an importer instead of being a net exporter of grains. In

addition, there are large fluctuations in grain prices, which reflects in the products derived from them: food and feed ones.

In this situation, it seems legitimate to require the companies, which purchase and/or process grains, to start the strategic cooperation with farmers: informing about the market needs, forecasts of production in the global markets, guarantees of purchase at the predetermined minimum price, cooperation with producers of reproductive materials, etc. All these elements should lead to regulation of the grain market for the benefit of producers and processors, and, consequently, consumers.

The fair value of the WIG-SPOŻYW (grain production) sector's companies quoted on the Warsaw Stock Exchange in Poland should be reached within three years, that is up to 2018 because it is the right estimation of further fast development of the Polish WIG-SPOŻYW (grain production) sector.

## LITERATURE

1. Borowski K., (2014). *Wyznaczanie punktów zwrotnych indeksu Wig przy pomocy wybranych metod analizy czasowej*. Bossa.pl, pp. 1-5.
2. Jajuga K., Jajuga T. (1996). *Inwestycje*. Wydawnictwo Naukowe PWN, Warszawa, pp. 34-57.
3. Jędrzejczak M., (2011). *Estymacja wartości godziwej. Podejście symulacyjne*, Powszechnie Wydawnictwo Ekonomiczne, Warszawa, pp. 133-138.
4. Kapusta F., (1976). *Zmiany struktury agrarnej i kierunków produkcji rolniczej w Legnicko-Głogowskim Okręgu Miedziowym*, PWN, Warsaw, pp. 11-12;
5. Kapusta F., (2012). *Agrobiznes*, Difin, Warszawa, s. 263-264.
6. Kapusta F., (2012). *Przemysł paszowy wspomaga produkcję mleka*, Przegląd Mleczarski nr 2, s. 23.
7. Kapusta F., (2012). *Samowystarczalność zbożowa Polski w pierwszej dekadzie XXI wieku*, Zeszyty Naukowe Uniwersytetu Przyrodniczego we Wrocławiu, Rolnictwo CII, nr 588, Wrocław, s. 112-113.
8. Parvi R., (2014). *Share price of the companies listed on the WIG-UKRAINE and their fair value*, *Share price of the companies listed on the WIG-UKRAINE and their fair value*, Itall Ltd., pp. 179-185.
9. Parvi R., (2014). *Investment funds and their financial effectiveness*, Goce Delchev University Macedonia & THOMSON Ltd. Slovakia, EDIS - Publishing Institution of the University of Zilina, pp. 262-267.
10. Parvi R., (2014). *Share price of companies listed on WIG20 and their fair value*. EDIS - Publishing Institution of the University of Zilina EIIC – 3 rd Electronic International Interdisciplinary Conference, pp. 169-177.
11. Pastusiak R., (2010). *Przedsiębiorstwo na rynku kapitałowym*. Wydawnictwo CeDeWu, Warszawa, pp. 34-46.
12. Pierce R., (2004). *Stocks, Options & Spreads*, Infinity Publishing, pp. 110-115.
13. Rocznik statystyczny Rzeczypospolitej Polskiej 2011.( 2011). GUS, Warszawa: 468, 459-460.
14. Rocznik statystyczny rolnictwa i obszarów wiejskich 2005. (2005). GUS, Warszawa: 385-386.
15. Rocznik statystyczny rolnictwa 2009. (2009). GUS, Warszawa: 148, 299-300.
16. Rocznik statystyczny rolnictwa 2010. (2010). GUS, Warszawa: 297-298.
17. Rocznik statystyczny rolnictwa 2014. (2014). GUS, Warszawa: 187, 197, 347-348.
18. Rynek Zbóż 2009 nr 37. (2009). IERiGŻ, ARR, MRiRW: 24.
19. Rynek Zbóż 2010 nr 39. (2010). MRiRW, ARR, IERiGŻ: 20.
20. Rynek Zbóż 2009 nr 36. (2009). MRiRW, ARR, IERiGŻ: 19.

21. Rynek Zbóż 2011 nr 41. (2011). MRiRW, ARR, IERiGŻ: 1, 22.
22. Rynek Zbóż 2012 nr 42. (2012). MRiRW, ARR, IERiGŻ: 21.
23. Rynek Zbóż 2015 nr 48. (2015). MRiRW, ARR, IERiGŻ: 23, 25, 27.
24. Stachak S., (1997). *Wstęp do metodologii nauk ekonomicznych*, Książka i Wiedza, Warsaw, pp. 132-133.
25. Stachak S., (2003). *Podstawy metodologii nauk ekonomicznych*, Książka i Wiedza, Warszawa, pp. 213-216.
26. Thompson B., (2008). *Stock Market Superstar*, Insomniac Press, pp. 52-54.
27. Uprawy rolne i wybrane elementy metod produkcji roślinnej 2011. (2011). GUS, Warszawa: 38.
28. Veale S., (2001). *Stocks, Bonds, Options, Futures*, Prentice Hall Press, pp. 88-125.
29. Bankier.pl., „Rynki, giełda, notowania GPW”,  
<http://www.bankier.pl/gielda/notowania/akcje>, accessed: January 27th, (2015).
30. Stooq.pl, “WIG-SPOŻYW”, [stooq.pl/q/?s=wig\\_spozyw](http://stooq.pl/q/?s=wig_spozyw), accessed: October 27<sup>th</sup>, (2015).

## ACCOUNTABILITY OF CORPORATE MANAGER: TO SYNTHESIZE OF THE DIFFERENT THEORIES BY ECONOMIC, POLITICAL, SOCIAL AND BEHAVIORAL PERSPECTIVES

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### **ABSTRACT**

*Following the high profile financial scandals of 2007-2008, corporate management has been faced with strong pressures resulting from more regulatory requirements, as well as the increasing expectations of various groups of stakeholders. The responsibility acquired a big importance in front of this financial crisis. This responsibility requires more transparency and communication, inside the company with the collaborators and outside of the company with the society, while companies try to improve the degree of control and to authorize managers to realize the objectives of the company. The objective of this paper is to present the concept of the responsibility generally and the various types of manager's responsibility in private individual within the company, as well as the explanatory theories of this responsibility through the various perspectives such as: economic, political, social and behavioral. This study should have academic and practical contributions particularly for regulators seeking to improve the companies' practices and organizational functioning within capital market economy.*

**Keywords:** *Manager, accountability, corporate performance, financial crisis, behavior*

### **1. INTRODUCTION**

Since the end of 1990s the managers were confronted with increasing requirements on one side on behalf of the financial and accounting markets, but also on behalf of the various more and more influential internal and external stakeholders. These requirements put the manager in an awkward situation because he is asked the latter to give more effective strategic choices, allowing the company to live and to develop in an environment of uncertainty and complex. Furthermore, the recent international financial scandals that have manifested in the early twenty-first century have shown the shortcomings of supervisory practices and gaps of the current system of governance of companies. Major theoretical and empirical contributions showed themselves about the problem of these crises, the interest focused on the functioning of governance of company to answer the problem posed by the crisis and find an explanation which limits the responsibility of the managers of the financial institutions.

Therefore the links between the governance and the empowerment are obvious; the good governance can be realized by a number of blocks of construction such as the responsibility and other mechanisms. Several countries such as the United States, France, Germany and the United Kingdom took measures to strengthen the responsibility of the manager within the framework of improvement of their governance systems of company by the adoption of new laws, creating mechanisms of long-term security, move forward the shareholder democracy and the employee participation to the governance, by applying new standards and establishing guidelines to increase expectations and responsibilities of the managers. Certain Laws were adopted by the states of these countries in answer to these requirements, thus we find that these countries focus on a main objective is to create the regulations obliging the managers to account (accountability) of their activities so on the function of control and surveillance and their impact over the company.

The objective of this study is to treat the various types of the manager's responsibility in private individual within the company, as well as the explanatory theories of this responsibility. Firstly,



we are going to show the origin of the term «the responsibility «with its numerous definitions which have been proposed by the researchers according to various disciplines and in terms of the culture of the country. So, the general responsibility of the company will arrive at the responsibility of its management (the manager of the company) and the various types of this responsibility. In the second place we approach the various theories which handle the concept of the manager's responsibility in the sense of the company according to different perspectives such as economic, political, social and behavioral.

**The sense of responsibility (Accountability):**

*« Accountability refers to the perception of defending or justifying one's conduct to an audience that has reward or sanction authority, and where rewards or sanctions are perceived to be contingent upon audience evaluation of such conduct »*

**Buckley and Tetlock**

The concept of the responsibility appeared to the end of the XVIIIth century in the Roman law during the writing of the civil and penal codes. The article (1382) of the civil code shows that «Any fact of the man which causes a damage to others obliges the one because of which it arrived, to repair it ". According to Mercier (2000), this term comes from Latin "Respondere" (to answer) mean that we are obliged to justify our actions and then to support the consequences and before any specifying the rights and the duties of the person who must be responsible. Of more the dictionary *Oxford* defines the term "responsible" as susceptible to be called to answer of responsibilities and to be capable of counting or of explaining. On the other hand more *le petit Robert* the responsibility can be defined as the intellectual, moral obligation, to carry out the duty or a commitment.

The term "responsibility" reflects mainly a moral or professional, ethical mixture of responsibility. Most of the definitions of this concept were proposed by the researchers according to various disciplines and according to the culture of the country. According to Licht A. N. (2002), the responsibility belongs to an important category of the social standards which can be collectively called «standards of governance ".

In social psychology, the responsibility is the social and psychological link between individual decision-makers on one hand and the social systems on the other hand. Edwards and Hulme (1996), defines it as the process according to which the actors and the organizations are kept responsible for their actions. From the political point of view, the responsibility is a mode of exercise of power, thus this concept moves generally of peer with other principles. These include the delegation, the communication, the autonomy, the authority, the power and the legitimacy. However the responsibility is put in several terms, legal (civil and penal responsibility), economic (financial and economic responsibility) and social (social responsibility of company).

The responsibility is not a universal concept; it is a complex and dynamic term. In most of the languages, the diverse forms of term of responsibility are used instead of the concept to be accountable in English. For example, in the French language this concept is source of confusion, it is generally connected with the terms of authority, power and obligation to be accountable. On the other hand in the English language we find two concepts the first one, the "responsibility" which means the extension of the field of decision of the entity and the second, the accountability what it is brought to account. For our part, it is in this second sense of the word responsibility that we are interested.

Finally, it is a complex and dynamic concept. She can be not only defined as a way by which the individuals and the organizations are kept responsible for their actions but also as a way by which organizations and individuals assume the internal responsibility during the elaboration of their mission and the organizational values. This concept leads us generally to ask some main

questions: for what as it is must be responsible. In front of whom must we be responsible? And what are the ways at our disposal to be responsible?

## **2. THE VARIOUS TYPES OF MANAGER'S RESPONSIBILITIES IN THE COMPANY**

To understand the responsibility of the managers of companies, it is essential to specify the responsibility and the objectives of the companies to which these belong. The term responsibility of the company includes every relation between the company and its internal and external actors. Some authors as Dobson (1999), shows that the only responsibility of the company is to try always to maximize its wealth. Jensen and Meckling (1976), considers the company as a knot of contracts. The company is a simple function of production and cannot have of responsibility. She cannot have of preferences, thus it is its agents who are responsible acts (the managers) because she does not possess clean personality.

The oldest shape of the company is the family company where the owners have the power of decision and responsibility as individual actor and not collective, Gomez (2003). The responsibility of the company here (responsibility of its founder) defines itself by the increase of the economic and financial interests as well as by the environmental protection of production and the social conditions and naturally the legal rules. The manager is rather guided by his own reference frame executive (familial) and his values with an objective to guard his reputation and not to make of damage, Robins (2008).

On the other hand, in a company of shareholder kind where there is a development of the rights of property, so the separation of the functions (property/manager), the maximization of the interests of the shareholders appears. According to Friedman (1970), the company has to try to increase its competence, to respect the rules of market, and to use its resources for accroitre its profits. Manager's responsibility is thus the profitability of the investments of the shareholders and the creation of their values. This company logic can be encouraged by mechanisms of payment aiming at aligning the payment for the leaders with regard to the maximization of the shareholder value.

Then, in the company of a wider vision (*partenariale*), it engages a responsibility towards the shareholders, the customers, the employees, the suppliers, the competitors, as well towards the other engaging parties which maintain a relation with it. As a consequence the direction of the company does not focus any more only on the couple leaders/shareholders but on all the potential engaging parties to contribute to the consequentive creation, and for a not only economic but also social and environmental objective. On the other hand, the likely conflict between the managers and the owners exceeds the research for the personal advantages of the actors. This vision of the company is rather based on the research for the best collaboration between existing and untouchable active persons. The company is not so any more as a set of contracts but as a laboratory of knowledge and the competence where the objective of the governance is to support the global learning and the durable innovation of the company, Charreaux (2004).

Thus the responsibility of company becomes that to maximize the creation of total value for the various engaging parties and the research for an economic and social global performance through the application of collaborates mechanisms, by aligning the self-interests of the actors, and by developing the know-how. A new vision of the company developed in 21th century based on the political and governmental aspects where the company seen as a modern institution steered not only to way *partenariale* but with an important public power. Gomez and Korine (2009). Thus the responsibility of the company rests on all the cultural, social conditions, and naturally the public standards.

Generally, the responsibility according to its adjective can be contractual liability, social responsibility or functional responsibility, or according to in front of whom the person is responsible (manager's responsibility in front of the board of directors). The manager of the

company is responsible for different interests with regard to various engaging parties to the company. More precisely, and within the framework of the company we can distinguish three main types of manager's responsibility: the first one is the financial and economic responsibility where the manager has to try to serve better the shareholders by maximizing the financial and economic value of the company. The second type of manager's responsibility is the social and human responsibility towards the various persons who exist inside the company (especially employees). Finally, the social responsibility of the manager towards all the internal and external engaging parties of the company.

### **3. MANAGER'S FINANCIAL AND ECONOMIC RESPONSIBILITY**

The traditional theories of the firm are the origin of this type of responsibility, and more exactly the classic economic theory and the neo-classic theory where the obligation of maximization of the financial results is the main objective of the company.

According to Adam Smith, the company exists for a function of production of possessions and services and increase of their profit, and for it the company has to engage all its resources and its investments. The neo-classic conceptions support this idea that the responsibility of the company and their managers impose the research for the profit with consequences several times negative or for the individuals who work inside the company or outside. According to this vision the manager tried mainly to protect himself against a potential eviction on behalf of the owners and to favor the objectives associated to the initial creation of their profits.

This type of responsibility is very limited and it is at present illegitimate because it leads to consider only a single group, that of the shareholders owners and because the others as the simple factors of production, now in the current theories of organizations the various parts constitute an important actor. Furthermore, Maslow (1970) shows that the man acts according to a hierarchy of needs (physiological, of security, social or membership, respect, personal development) and not only according to the financial interest.

### **4. MANAGER'S SOCIAL RESPONSIBILITY**

The demands of accounts increased to handle wider to include also the engaging parties such as the employees, the customers or the others, Martin (2009). According to this type of responsibility the managers of company have obligations towards the persons who work inside the company and especially the employees {the manager has to make the employees prefer of justifiable and profitable risk-taking on the long term (not necessarily on the short term) and not to think still of their pensions}. Thus according to this type the managers have to take account of the other actors and not only the shareholders.

This type of responsibility neglects the leading role of the company (the outside of the company) in the life of the organization. Posner and Schmidt (1984) also shows that this model neglects the role of the other people who can influence the decision of manager (for example the suppliers). According to Paved (2000), there is a daily manager's responsibility compared with the internal stakeholders (the employees), but also of other responsibility compared with the external partners (for example the customers, the service of marketing and consumption, labor syndicates and their relations with the employees) with various interests.

On the other hand we find some manager dedicates himself more on the maximization of the profits of his company and he privilege the sustainability of their structure, his economic efficiency and he doesn't hesitate sometimes to lay off employees if it is conducted to ensure the success of his company.

## **6. THE SOCIETAL MANAGER'S RESPONSIBILITY**

In this type of responsibility the managers of the company are responsible towards the internal and external partners of the company and according to this model the role of managing not only the profit of the internal partners but he owes considers all the external actors when he makes decisions especially strategic to assure at best the development of the company. We find in this type of responsibility some manager who gives more importance for the societal stakeholders which are in relation express with his company. Where it looks for this manager to maximize their personal prestige in front of these stakeholders and of external valuation to be acceptable socially.

Freeman (1984) to grant a central place for the manager, according to him the manager's responsibility exceeds the traditional vision, the manager plays a political and social role through the participation the public debate, and through its work with a real team to understand the multitude of stakeholders and strengthen the credibility of the company.

Finally it is useful to quote that the manager's responsibility has a temporal dimension that is the manager is responsible towards his company generally on the long term, thus he must be conscious of his decisions and his power, and that is the manager is responsible towards himself before any, as a man and without having what is its work.

## **7. THE EXPLANATORY THEORIES OF THE MANAGER'S RESPONSIBILITY IN THE COMPANY: VARIOUS PERSPECTIVES**

Several theoretical currents contribute to the understanding of the general responsibility of the company, naturally the responsibilities of their manager. We find the works bound to the classic approach (the theory of agency and the costs of the transactions), the theory of the stakeholders, the theory of the dependence of the resources in complement with the institutional neo-theory, the strategic theories, and the behavioral theories. The main initial idea is to favor the ruling relation and the shareholder as the main key of the performance in the company.

## **8. THE ECONOMIC PERSPECTIVE**

The work on the governance of company begins from the theoretical hypothesis within the framework of the theory of agency where there is a relation which defines by a contract between executives managerial which deposits the power and the capacity to make the decisions (the manager) of one side and the shareholders on the other side. This traditional model of the governance limits the objective to explain the financial structure of the company. This relation of agency leads to a conflict of interests and differences of the points of the seen especially where there are many asymmetries of information between both parties.

Berle and Means (1932) examined the separation of the functions of property and the direction, this entrained separation of the conflicts of interests between the managers and the shareholders. These conflicts led the manager in pursue other objectives that the main role of maximization of the shareholder value. According to Williamson (1991), and from wider point of view of the relation of agency between the manager and the shareholders, the role of manager is an administrator of the transactions in the company where he has to try always to reduce transaction costs between the company and all the actors which can be as constituting the coalition.

According to the theory of the costs of the transactions, this relation of agency can be bigger in a way where the company can have contracts of the transactions with several parties. Manager's responsibility of the company rests here to manage the various prohibitions of a way where each of these parties exit with its profit (naturally through the minimizations the costs of agency and the costs of the transactions where the company seen as a knot of contracts and a team of production). According to this vision, the manager follow objectives of economic nature, his

purpose is to satisfy the financial interests. And in this context, manager's responsibility is minimal; the only obligation for him is to maximize the profit.

According to Jensen (1983) various mechanisms are necessary to align the interests of mandates and make the manager more responsible, on one hand internal mechanisms to the company, generally imposed by the law (for example, the board of directors, the general assembly of the shareholders) and on the other hand of the external mechanisms based mainly on the power of market (for example, the market recovery, auditors' market).

## 9. THE POLITICAL PERSPECTIVE

This theoretical current contributes to the understanding of the responsibility of the manager through an additional approach in the theory of agency and the costs of transaction. It is about the theory of entrenchment of the managers. This approach applies to all the partners of the company and especially the manager who tries to preserve his place in the company and to increase his entrenchment to reduce the risk of revocation. This allows him to maximize his power and his discretionary space, besides the various advantages that he perceives especially his payment.

### ➤ *Entrenchment of managers and their responsibility towards the shareholders*

The manager as the agent particular to the company can use the resources to take root and escape from their responsibility towards the shareholders in a way that he increases his freedom of action, to increase his pensions and his secondary advantages, Charreaux (1997). From point of view of the shareholders, this type of behavior followed by the manager is illegal when he leads to negative consequences concerning the investment and the increase of the general costs in the company where the manager looks in privilege for his interests and for his personal advantages, and consequently a negative effect occurs on the wealth of the shareholders, Paquerot (1997).

According to Sheifer and Vishny (1989) the managers follow several processes of formal and informal entrenchment. In a formal way, the manager can favor the development of activists where he uses the asymmetry of information as way to escape from control. On the other hand and in informal way the manager can make alliances with one or several actors of a quotation to the company (for example with employees) and on the other side with the shareholders, or simply through the plurality of offices of manager and administrator, Paquerot (1997). This manager develops generally several strategies to serves him in the use the averages at his disposal to have a wider meaning of a word on all the stakeholders. We can quote three types of strategies through the literary man:

Firstly he can proceed to the specific investment policy as remarkable tool of entrenchment, Stiglitz (1992). This type of entrenchment of manager is privilege by several research works such as Jenses (1986), Shleifer and Vishny (1989).

According to Boot (1992) the company having very specific activists where the manager tries to take advantage of these activists for its interests (where there are fewer controls on these activists and on the performance appraisal). These less visible activities in the company lead us to speak to the second strategy at the disposal of the manager to retread his responsibility; it is the manipulation of the information. The manager always tries to make the understanding of the very difficult information. According to Charreaux (1997), he favors the disclosure of the information which is useful for his human capital and as well increases the uncertainty perceived by the other rival managers through these manipulations.

Another type of managers' entrenchment strategies is the one relational network in a formal or informal way; in more these networks can be made with all the actors of the company. Paquerot (1997) shows that the manager can realize relations with one or several groups of the

shareholders. He tries to make a relational network with the employees where he can keep his post and at the same time realize employee's interests.

By the way informal, the manager can establish low relations on his capital with the administrators of the company through the connections of the board of directors especially if he is at the same time general president of board meeting, Pichard (1998). On the other hand he can realize relations with other administrators outside of the company when he is mandate in other company, thus that to allow him to make exchanges with them and he profit in that case of the confidence to make an advantage and take root more. We can conclude that the impact of this type of behavior followed by the manager is unfavorable to the interests of most of the actors of the company where its performance is not easily observable.

### ➤ *The stakeholder theory and manager's responsibility*

Today, the decision of manager affected by the social pressures so that he to consider his responsibility towards in sound aggravate. The origin of thought on which the manager must be responsible and in the work of Dodd (1932), quoted by Mercier (2010). Dodd (1932) shows that the field of the responsibility of the augment manager for all the groups which are in connection with the company. According to him, there are three main groups of interests:

Firstly, the group of the shareholders which invests capital in companies, thus the manager has to protect and reassure their investments and be responsible in the use of this capital to handle which to allow maximizing their profits. Then, the actors who give their human effort so that the company to live and develops where the manager has to take into account their safeties, wage satisfaction and other rights. At the end, it is the group which exists outside of the company that is the customers, the suppliers and the company generally where the manager owes satisfied their expectations as regards products and services.

The concept of fascinating parties is wide and ambiguous. It is used in several domains but essentially in the business administration. Freeman (1984) defined the stakeholders by all the individuals or the groups which can affect or are influenced by the decisions of the managers of the company (that is in a positive way or in a negative way). These stakeholders can be classified in a simple way between the internal stakeholders (the actors inside the company especially the employees, the shareholders and the managers) and the external stakeholders that is all the groups which have implicit or explicit relations with the company, for example the suppliers, the government, the competitors or the environment.

This theory exceeds views it classic of the company. It looks for the interests of the stakeholders not shareholders and to widen the field of the manager's responsibility, Mercier (2001). Furthermore, it is the theory most frequently usable through the academic literature, it presents the company as a group of collective interests and it helps the manager to make more useful and more effective decisions and in a strategic way because of their skills, Freeman (1984).

According to Donalson and Preston (1995), there are three main visions of this theory, worth knowing descriptive, instrumental and normative vision. According to the normative vision, this theory allows to legitimize actors' interests not shareholders of the company and to escape the classic vision. Then, this vision allows identifying the values and the obligations where the manager can guide the company in a strategic way, (the social performance of the company here is very important), thus this vision gives an ethical foundation to the theory. According to the instrumental aspect, this approach shows that the manager has to manage the relations with the stakeholders of a way which allows him to realize the purposes of the company and to report the responsibilities towards the owners of the company, Jones and Wicks (1999). At the end and from point of descriptive view, this model helps to explain the behavior and the relations of the company with sound aggravate, and how the manager must be responsible towards the

interests of the various stakeholders. Finally it allows taking advantage of the history of the company to have opportunities at the future, Donalson and Preston (1995).

We can conclude that the theory of the stakeholders reformulates the role of manager and the company widens the vision of agency. In this context and from responsible point of view, the manager has to try to reduce the risks which can influence the interests of all the actors, created by the pensions for the various partners with an optimal balance of the interests, and develops his company. As a supplement to the partnership approach of the theory of the stakeholders, the theory of the integrated social contracts shows that the company director have a moral and ethical responsibility towards the stakeholders and in collective way, Mathieu and al (2010). According to her the company lives in a place where he has to respect and serves the interests of the company, that is the behavior of manager owes considers that his company signed an implicit contract with the company where it develops.

On the other hand, we can quote that this theory knows some limits, of a highly-rated it is difficult to encircle all the interests of all the stakeholders especially with a rationality limited by manager, and on the other side it is difficult also to control if the manager was very optimal in its decisions concerning these stakeholders. Thus it is relevant to envisage the possible reconciliation of the theory of the stakeholders with other paradigms as the theories of the strategy based on the skill and the institutional neo-theory. These various different brought theories propped up important regarding the *manager's responsibility*.

## 10. THE SOCIAL AND BEHAVIORAL PERSPECTIVE

### ➤ *Theory néo institutional and manager's responsibility*

The basic idea of the theory néo institutional is the fact that companies adapt themselves not only to the internal constraints but also to the values of the company external. The new institutionalisms try to describe the processes which transform the practices and the organizations into institutions. Richard Scott (1992) defines the institutionalization as " the process according to which the actions are repeated and give by this fact a meaning similar to the other actions ".

This theory offers the ground the most exploited in the understanding of certain behavior in the company. It shows that the manager tries to adopt behavior acceptable legally and competitive. The legitimacy where the company tries to realize it comes from the cultural and social requirement on it. According to Suchman (1995), this legitimacy is a generalized perception that the actions of an entity are desirable, suitable and corresponding to a system of standards, values, faiths and definitions socially built.

Dimaggio and Powell (1983) stipulate that the fast distribution of quality circles in the American companies is motivated by the legitimacy of the companies which adopted these practices and not by their efficiency. This legitimacy is so much looked for especially in an uncertain environment. It becomes a need for which companies try to acquire. Each of the managers looks by making a decision to legitimize towards his company and towards the other members of the company. The legitimacy is translated here on the level of the managerial decisions by a more acceptable decision. The managers try to legitimize their decisions of investment, financing or governance (for example, the decision of reduction or increase of the size of the board of directors may be explained as search legitimacy).

Thus these questionings of the legitimacy can have a positive influence, where they urge the managers to emphasize the necessity of managing well the social and environmental risks, thus they support the development of a responsible reflection for the manager. On the other hand, Assaba and Lieberman (2006) underlines that when a set of social players adopt a behavior, this behavior will be considered as institutionalized and other social actors would be incited to adopt it without any reflection.

In this context, the institutional neo-theory postulates that the organizations which evolve in the same organizational field tend to develop more and more complex common standards and have to acquire gradually similar behavior. This comes back to the existence or from explicit rules or from the laws which aim at assuring this mechanism of convergence, or usual activities which are underlain by standards, values and expectations, with cultural character, or still by the wish to be or to look like the others.

However, this theory uses the term of isomorphism to describe the convergence resulting from the mimicry (manager use mimetic behaviors). The isomorphism is considered by the followers of the neo-institutional theory as the concept the most adapted to the description of the dynamics of homogenization. According to DiMaggio and Powell (1983), the isomorphism allows identifying the process which leads the unit of a population to look like the units facing the same environmental conditions.

What allows explaining the behavior of the managers? These authors distinguish three forms of isomorphism: the coercive isomorphism, the normative isomorphism and the mimetic isomorphism. They expressed that the mimetic isomorphism results from the wish to look like the other organizations. It is about the mimicry of companies by implementing the practices of others, those who are the most recognizable, those most successful competitors or those were considered as the most justifiable in a field. The managers of companies find in their memberships in a relational network this possibility of imitating the other managers who are successful, they can thanks to the exchange and to the sharing which becomes established within identified networks the most successful practices and as a consequence adapts it. The mimicry is a solution during the managerial decision-making, a choice of investment can be only made by adopting a mimetic behavior of others. Of more this mimetic behavior can explain for example a dividend policy or can explain as well a financing strategy.

Indeed, the purpose of this shape of behavior used by the company is to award its necessary responsibility to continue to exist. And this mimetic process it is going to bring to realize this social responsibility is the fact of integrating and of adapting itself to common standards. Furthermore in numerous situations, the companies of the same organizational field act not by concern of efficiency or research for optimal solutions but with the aim of conforming to institutional pressures which lead them to adopt similar organizational models. The legitimacy is a purpose looked more and more by the managers. To be able to legitimize its choices and his decisions in front of shareholders and of the various stakeholders is a purpose which every manager tries to have. This legitimacy allows reducing the pressure which is put on them.

We can conclude that this theoretical approach, explains that the existence of a company in an environment gives an idea on what companies should look like and the way they should behave. They have in fact tendency to develop common standards and similar behavior by adopting behavior in the purpose and the desire to be justifiable with their peers and what whatever is the nature of the constraints which urge to converge on these common standards.

### ➤ *The behavioral approach and the manager's responsibility*

This approach gives the importance for behavioral biases which can influence the whole governance system (main influence on the explanation of the information and the way of manage the conflicts by the manager where we find a not insignificant affectation of cognitive biases on this approach), Charreaux (2005). They allow us to escape the traditional vision of the governance a behavioral vision of the relation between the manager and the stakeholders. Charreaux (2005) show that there are the four major currents of the behavioral approach: Behavioral economy, finance behavioral, current behavioral "economic law" and the behavioral current in strategic management (Table 1).



The behavioral economy base on the contributions of the cognitive and social psychology for includes the behavior of manager during the grip of economic decisions in a situation of the uncertainty, Rabin (2002). On the other hand the behavioral finance becomes attached to the study of the behavior of the individual, when it is a question of making a decision of investment, a type of decision with which is confronted the manager of the company. Thus the objective this approach is the understanding and the prediction of the behavior of the agents on the financial market and the process of grip a decision. So, the behavioral finance can be seen as the application of the psychology in the finance. On the other hand the strategic current of behavior tries to study the influence of the behavioral ways (especially cognitive) on the strategic decision of steering for example the impact of board of directors on the manager's cognitive reflection, Langevoort (2001).

*Table 1: The main currents of behavioral literature in economics and management sciences as Charreaux (2005).*

			<i>Objectif</i>	<i>Main Authors</i>
<b>Behavioral Economics</b>			<i>Illuminating the economic behavior with psychology, anthropology, sociology ...</i>	<i>Kahneman, Tversky, V. Smith, Rabin, Loewenstein...</i>
	<b>Neuroeconomics</b>		<i>Study of brain imaging in economic decision-making</i>	<i>Camerer, Prelec...</i>
	<b>Law &amp; Economics</b>		<i>Improve the explanatory theories of law (paternalism ...)</i>	<i>Jolls, Korobkin, Langevoort, Cunningham...</i>
<b>Behavioral Sciences Management</b>	<b>Finance</b>	<b>Market</b>	<i>Explain the anomalies</i>	<i>Shiller, Shleifer, Thaler, Barberis, Greenfich...</i>
		<b>Company</b>	<i>Understand financial decisions and the role of governance</i>	<i>Shefrin, Baker, Bigus, Charreaux...</i>
	<b>Accounting</b>		<i>Analyze failures analysts and financial auditors</i>	<i>Ricardo...</i>
	<b>Marketing</b>		<i>Explain consumer behavior</i>	<i>Filser...</i>
	<b>Strategic Management</b>		<i>Understand decision making process</i>	<i>Simon, March, Hogarth, Bazerman, Schwenk.....</i>

#### ➤ **Behavior of manager and its responsibility in the company**

Various behaviors are kept by the manager during its managerial decision-making. But how we can define the behavior of manager, which are its dimensions and its factors determining within the framework of commitment responsible for this manager?

The decision-making concerns any alive body endowed with a nervous system. It interests every individual and every group. It is about a method of reasoning which can lean on rational and/or irrational arguments. The theorists of the Carnegie School March, Simon, Cyert asserted that the complex decisions are more the result of factors bound to the behavior than the systematic research for an economic optimization. For them, the individual cannot spot all the possible

choices then he chooses the satisfactoriness solution and not the maximizing solution. The manager thus motivated by its personal interest.

According to the traditional approach of the responsibility (financial approach) the manager follows generally two behaviors (the wait-and-see behavior and the adaptive behavior). Strap and Reynaud (2004) shows that the manager adopts a wait-and-see attitude when the not very clear situation and it is need for time to make a decision. According to the second case (current decision) the manager tries to solve the problems by a strategy which plans to return mainly the legal risks and by concern of protection the economic advantages and of the investment (economic and legal responsibility).

In reality, we find several aspects of behavior such as: deliberate versus spontaneous, cognitive versus emotional, individual versus collective. The maybe deliberate decision of manager where there are mechanisms which are formalized, as the board of directors, the system of remuneration and incentive, or spontaneous where there are informal mechanisms for informal reliable networks, Charreaux (2002). As well as the behavior of manager can be based on a cognitive either emotional logic, according to Rabin (2002) we find the origin of these dimensions in the literary of psychology more than in finance where the feelings of the managers present to explain their decisions.

On the other hand, we find a lot of individual or collective behavior of manager in governance and corporate finance, where the manager must be responsible towards rulers (legal, political, social) to manage to realize the objective of the company. According to Chareaux (2003), and within the framework of the partnership approach of the governance, the manager makes the decisions in interaction with various relational and social networks (for example, the board of directors) that influence his behavior. A manager has more tendency to imitate the behavior of another manager in case he maintains with him a contact which allows to observe and to interpret his behavior and how he react concerning his responsibilities against the others.

Thus, the manager's networks may increase the mimetic behavior and afterward increase the collective cognitive biases of the behavioral finance. This type on the bias is a questioning of the initial decision of the decision-maker by aligning with the tendency. The fact of belonging to a community of the managers is susceptible to advance this bias. This questioning of the decision can be had a negative impact when it turns out against the initial decisions, but it has a positive impact when it is in compliance with the same decisions.

The main origin of these biases is psychological are many in the literature and we can classify these biases according to two criteria the first one cognitive / emotional and the second individual (decision-making in isolated way) / collectives (the decision-making in a collective frame), Charreaux (2005). The consideration these behavioral biases concerning the manager can explain the various stakes in his responsibilities (shareholder, partnership, and societal).

We quote for example from these biases the bias of mimicry) as a cognitive and collective bias which has a major influence on the behavior of manager. Other bias which can drive to an inequitable behavior is cognitive biases based on the phenomena of groups (sharing of the same initial training which leads to a cognitive homogeneity between the managers). Greenfinch (2005) presented the main behavioral biases following the various behavioral dimensions for the finance and governance of company, (Table 2).

*Table 2: The various on the bias behavioral types<sup>4</sup>.*

	Individual bias	Collective bias
<b>Cognitive bias</b>	Anchor, attention allocation, beliefs, cognitive overload, cognitive dissonance, framing, heuristics, irrationality, representativeness, mental compartmentalization, usually retrospective, home ...	Cascades, common beliefs, consensus, handling, memes (*), mimicry, paradigms, percolation, rational expectations (positive feedback / positive feedback), social learning ...
<b>Emotional bias</b>	Addiction, endowment effect and inheritance wait and magical expectations, denial, greed, fear, loss aversion and regret, wishful thinking, optimism, confidence, pride, status quo	Conformism epidemic / contagion, mania, thoughts or whims group / inhibitions, mass hysteria, fashions, herd behavior, peer pressure ...

(\*)Cultural transmission units

Concerning the main determiners of the behavior of company director. Simon (1955) shows that the success of manager in his way to make the decisions depends firstly in the relevant and clear knowledge and his capacity to collect the useful information and afterward to handle this information to incorporate into his decision-making. But the behavior of manager influenced in this stage of decision (collect and handle the information) by the reference biases such as the faiths, Shefrin (2001). The manager would be influenced by the self-interests in particular their values and the power of this manager would result characteristic personal and of the nature of the pressures with which he is confronted, thus we find that the frame rather plays an important role at the hour when the leader to face his responsibilities towards his company, where this frame gets organized generally author of the value, the influences of the partners, and the uncertainty. Simon (1995).

The behavior of manager depends as well on its capacity to estimate the available alternatives where he is responsible for making the best choice, and here the knowledge, the learning and manager's cognitive capacity plays a remarkable role. We can evoke also that the optimism and the reliable supplement can lead the manager to a profitable behavior for the shareholders just as the manager is interested in his profits. Baker and al. (2004). At the end the manager can be selfish at the time of his choice through the personal research for his advantages such as his payment, his crawling, and his legitimacy either heard altruism (in the sense of their responsibilities) and to act in interest of the various parts of the company and the company generally.

Finally, the following table presents a synthesis concerning the responsibilities of the managers and his potential behavior according to the various theoretical approaches of the company.

<sup>4</sup> This Table by Charreaux (2005).

*Table 3: The responsibilities of the managers and their potential behavior according to the various theoretical approaches of the company.*

	<b>Contractual approach</b>		<b>Cognitive approach</b>		<b>Behavioral approach</b>
	<b>Shareholder</b>	<b>partnership</b>	<b>strategic</b>	<b>Neo-institutional</b>	
<b>The company's main objective</b>	Production function and economic and financial objectives	Economic, financial, and social objectives	Competitive and sustainable objectives	Cultural and intermental objectives	Objectives of profitable behavior for all groups
<b>Manager roles and responsibilities</b>	Responsibility results in maximizing shareholder wealth	Responsibility results in maximizing stakeholder wealth	Responsibility is reflected in the ability to optimize the production and selection of slimming company's strategy	Responsibility is reflected in the satisfaction of the objectives of the entire "network" of stakeholders	Behavioral responsibility of the relationship between the manager and the stakeholders
<b>Controls the behavior of manager</b>	Seeks to reduce conflicts of interest and agency costs	Seeks to reduce conflict and balance the different interests	Seeks optimal use of different resources	Seeks to adopt legally acceptable and competitive behavior	Seeks to reduce the influence of behavioral biases on leadership decisions
<b>Type of corporate governance</b>	Shareholder governance	Partnership governance	Cognitive governance	Cognitive governance	Behavioral governance

Source: author

## 11. CONCLUSION

In the complex situations the company managers try to find a model of responsibility on which they are going to base themselves at the time of decision-making to try to reduce the unpredictability and the uncertainty in which they are. The objective of this paper was to clarify the concept of the responsibility generally and the various types of the manager's responsibility in private individual in the sense of the company, as well as the explanatory theories of this responsibility through various perspectives such as economic, political, social and behavioral. These theories offer the ground the most exploited in the understanding of certain behavior in the company, they show that the manager tries to adopt justifiable behavior and at the same time responsible.

## LITERATURE

1. Berle, A.A. ET Means, G. (1932), « The Modern Corporation and the Private Property », New York, McMillan.

2. Boot, A.W.A. (1992), « Why Hang on to Losers? Diversitures and Takeovers », *Journal of Finance*, 47(4.)
3. Charreaux G. (1997), « Vers une théorie du gouvernement des entreprises », in G. Charreaux (éd.), *Le gouvernement des entreprises : Corporate Governance*, théories et faits, Economica, p. 421-469.
4. Charreaux G. (2002), « L'actionnaire comme apporteur de ressources cognitives », *Revue Française de Gestion*, vol. 28, n° 141, novembre-décembre, p. 75-107.
5. Charreaux G. (2003), « Le gouvernement d'entreprise », in J. Allouche (coord.), *Encyclopédie des Ressources Humaines*, Vuibert, p. 628-640.
6. Charreaux G. (2004), « Les théories de la gouvernance : de la gouvernance des entreprises à la gouvernance des systèmes nationaux », *Cahiers du Fargo*, n°1040101.
7. Charreaux G. (2005), « Pour une gouvernance d'entreprise 'comportementale' : une réflexion exploratoire... », *Revue Française de Gestion*, vol. 31, n° 157, p. 215-238.
8. Dimaggio P. J. et Powell W. W. (1983), « The iron cage revisited: institutional isomorphism and collective rationality in organizational fields », *American Sociological Review*, 48, p. 147-160.
9. Edwards, M., and Hulme, D. (Eds.) (1996a), « Beyond the magic bullet: NGO performance and accountability in the post-Cold War World », West Hartford, CT: Kumarian Press.
10. Donaldson T., Preston E. (1995), « The Stakeholder Theory of the Corporation: Concepts, Evidence and Implications », *Academy of Management Review*, 20(1), p. 65-91.
11. Freeman R. E. (1984), « Strategic Management: A Stakeholder Approach », Pitman, Boston.
12. Friedman M. (1970), « The Social Responsibility of Business is to increase its profits », *New York Times Magazine*.
13. Gomez P.Y. (2003), « Jalons pour une histoire du gouvernement des entreprises », *Finance Contrôle Stratégie*. vol.6, n°4, p. 183-208.
14. Huault I. (2002), « La construction sociale de l'entreprise : autour des travaux de Mark Granovetter », Calvados.
15. Jensen, M.C. (1983), « Organization theory and methodology », *Accounting Review*, Vol.58.
16. Jensen M.C. (1986), « Agency Costs of Free Cash-Flow, Corporate Finance, and Takeovers », *American Economic Review*, vol. 76, n° 2, May, p. 323-329.
17. Jones T. M. and Wicks A. C. (1999), « Convergent stakeholder theory », *Academy of Management Review*, 24 (2), p. 206-221.
18. Langevoort D.C. (2001), « The Human Nature of Boards: Law, Norms, and the Unintended Consequences of Independence and Accountability », *The Georgetown Law Journal*, vol. 89, p. 797- 832.
19. Licht A. N. (2002), « Accountability and Corporate Governance », Available at SSRN: <http://ssrn.com/abstract=328401>
20. Mathieu A, Chandon J-L, Reynaud E (2010), « Le Développement Durable en actions : approche de l'innovation dans le champ de la durabilité », Conférence de l'AIMS, Luxembourg, juin.
21. Martin M. (2009), « The limits of accountability, Accounting Organizations and Society », vol. 34, no. 8, pp. 918-938
22. Martinet A.C. and Reynaud E. (2004), « Stratégies d'entreprise et écologie », Economica, Paris.
23. Mercier S (2001), « L'apport de la théorie des parties prenantes au management stratégique : une synthèse de la littérature », *Actes de la XIème conférence de l'Association Internationale de Management Stratégique*, Université Laval, Québec, 13 – 15 juin.

24. Mercier S (2010), « Une analyse historique du concept de parties prenantes : Quelles leçons pour l'avenir ? », *Management & Avenir*, n° 33, p. 140-154
25. Mercier S (2000), « La formalisation de l'éthique en gestion : une analyse critique », avec J-M. Courrent, in *Actes de la 9ème Conférence Internationale de Management Stratégique*, Montpellier.
26. Paquerot M. (1997), « Stratégies d'enracinement des dirigeants, Performance de la Firme et Structures de Contrôle », in *Le Gouvernement des Entreprises* (éd G. Charreaux), Ed Economica, p.105-138.
27. Pava ML. (2000), « The search for meaning in organizations: seven practical questions for ethical managers », *Sloan management review*, vol. 41, n° 2, pp. 101 - 102.
28. Pichard-Stamford J. P. (1998), « La légitimation du dirigeant par le réseau des administrateurs », dans *Actes des XIV journées nationales des IAE*, Nantes, p.-389-407.
29. Posner B.Z. and Schmidt W. H. (1984), « Values and the American Manager: an Update », *California Management Review*, vol. 26, n°3, pp. 202-216.
30. Rabin M. (2002), « A Perspective on Psychology and Economics », *European Economic Review*, vol. 46, p. 657-685.
31. Robins F. (2008), « Corporate Governance after Sarbanes-Oxley: An Australian Perspective », *Corporate Governance*, vol.6, n°10, p. 34-48.
32. Shefrin H. (2001), « Behavioral Corporate Finance », *Journal of Applied Corporate Finance*.
33. Shleifer A. and Vishny R.W. (1989), « Management Entrenchment: the case of managers specific investments », *Journal of Financial Economics*, 25, p.123-139.
34. Stiglitz J.E., Edlin A.S. (1992), « Discouraging Rivals: Managerial Rent Seeking and Economic Inefficiencies », *NBER Working Paper*, n° 4145, August.
35. Suchman M.C. (1995), « Managing Legitimacy: Strategic and Institutional Approaches », *Academy of Management review*, Vol. 20, n°3, 571-610.
36. Williamson O. (1991), « Strategizing, economizing and economic organization », *Strategic Management Journal*, vol. 12, pp. 75-94.

## METHODOLOGICAL ASPECTS OF MEASURING BUSINESS RESILIENCE

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### ABSTRACT

*Business resilience is becoming increasingly important for companies because of the dynamic business environment and frequent appearances of crisis situations. Companies which are less resilient will lag behind after every crisis situation. This paper is presenting positive effect that companies have from business resilient models, and stresses the importance of measuring resilience of the companies. After the historical review of measuring business resilience, this paper describes eight significant fields for measuring business resilience.*

**Keywords:** *Business Resilience, Business Continuity, Disaster Recovery.*

### 1. AREAS OF BUSINESS RESILIENCE

In the long term, it is highly likely that a company will face numerous crisis events and in order to company survive in the long term it should establish models of business resilience (business continuity). Models have been established by evolution of many other areas which company has implemented in order to bring the level of risk to an acceptable level (Quarantelli, 1999, pp. 2-9).

The evolution of business resilience can be divided into the evolution of crisis management, risk management and contingency planning (Blyth, 2009, pp. 2-16). Another way is to divide the evolution of the development of business resilience into two main parts: planning business resilience and disaster recovery (Hiles, 2010, p. 27). More detailed division may include the following areas (Livingston, 2011, p. 8):

- Risk Management
- Facilities Management
- Disaster Recovery
- Mass Absentee Planning
- Quality Management
- Health & Safety
- Knowledge Management
- Emergency Management
- Security
- Crisis Communication & Public Relations

Business resilience throughout history (over the last 50 years) has mostly been researched through the area of disaster recovery. However, disaster recovery is only one of many areas of business resilience. The main difference between disaster recovery and business resilience is that under disaster recovery technological approach is primarily used. Its goal is to provide

effective mechanisms that can restore data and applications lost during the crisis event. The aim of the area of disaster recovery is to ensure the stability of the critical IT infrastructure in enterprises. The term business resilience is monitored not only through the IT infrastructure but the entire activity of the company, as well as numerous other activities such as public relations by means of company maintains its reputation during the crisis event. Business resilience includes the use of external mechanisms such as the use of insurance to support the business resilience plans and development reaction plans by which the company acts during the different actions of competing companies.

## 2. BENEFITS FOR COMPANIES FROM BUSINESS RESILIENCE

Many authors have analyzed specific crisis events from the history and have shown how the development of business continuity models and implementation of models in companies increases resilience of the company (Low, Liu, Sio, 2010, pp. 220-229). However, rare models are measuring the positive effects of implementing business continuity models in companies. Chart 1 shows the loss of the company (negative effect) resulting from the emergence of a crisis, if the company has developed a model of business continuity which includes response that can reduce the loss.

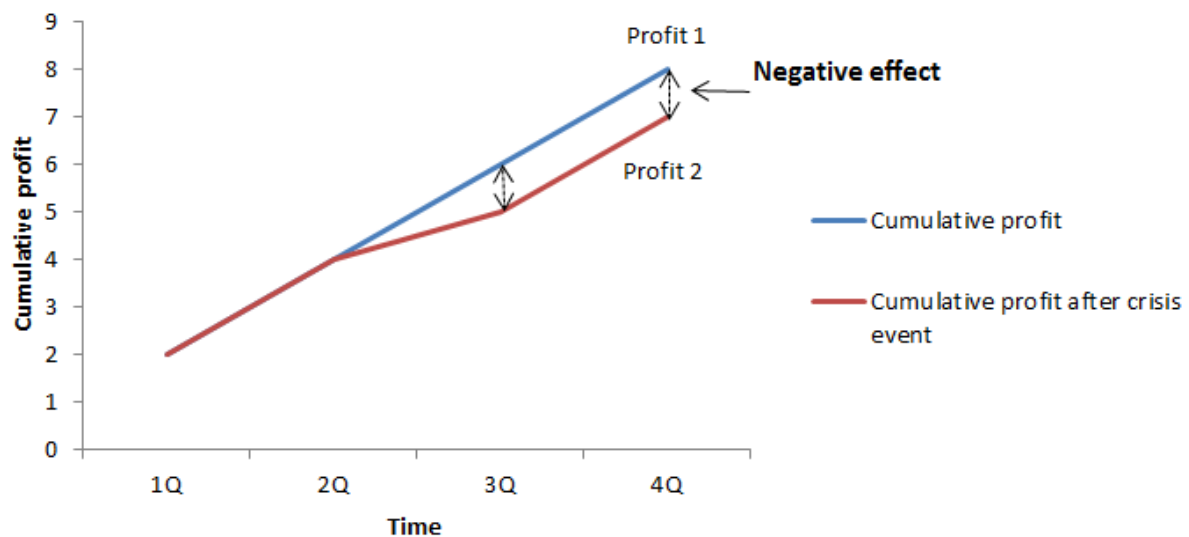


Chart 1: Negative effect after occurring crisis situation (Kristo, 2015, p. 32)

Chart 2 is the positive effect of the introduction of business continuity model. The difference between the variable Profit 2 (profit after the occurrence of a crisis situation with the established model of business continuity) and variables Profit 3 (profit of company that does not have a business continuity model) is the positive effect that when the marginal effect Profit 2 is higher than the marginal effect Profit 3.



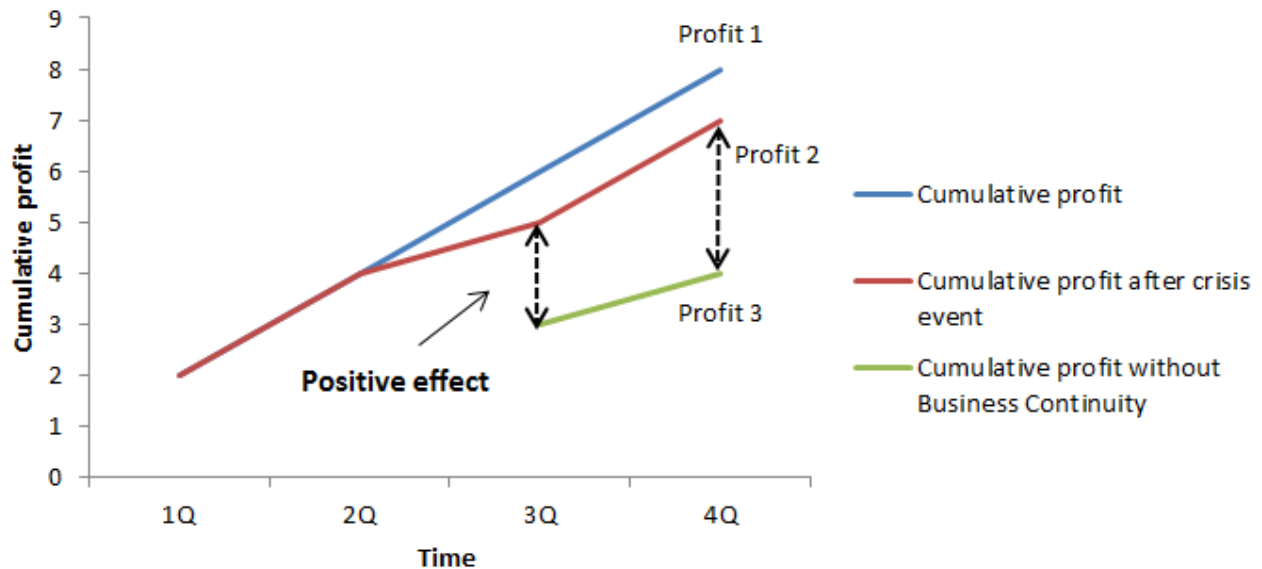


Chart 2: Negative effect after occurring crisis situation (Kristo, 2015, p. 32)

Marginal effect on the chart 2 in the function Profit 2 is higher than the marginal effect in the function Profit 3. The result is that the positive effect after the occurring crisis in the third quarter is smaller than the positive effect in the fourth quarter. This effect is the result of faster re-establishing business of companies that have developed the model of business continuity. Returning of cumulative profit of companies to function Profit 1 is possible if the growth coefficient function (Profit 2 and 3) is higher than the coefficient of growth functions Profit 1. If this condition is not met the company will fail to return the business to the profit level before the crisis event.

The positive effect of the crisis can also happen in the process of company's recovery from the crisis event if in the process of recovering from the crisis event operational activity of the company is organized more efficiently than the previous organization (before the crisis situation). However, companies often postpone certain changes, e.g. in the technological process (using new technologies), but after a crisis event they are forced to buy new plants or equipment. In this way technological capabilities of enterprises are on the higher level.

### 3. INDICATORS FOR QUANTIFYING BUSINESS RESILIENCE

The example, which has survived more than 2,000 years, can often be found as an example of extremely resilient organization. Despite wars and corruption, and a large degree Catholic Church held unchanged value. Coutu (2002, pp. 46-51) has produced an interesting report that from psychological perspective presents three main elements which make the organization resilient:

- 1) unwavering acceptance of reality,
- 2) deep conviction and powerful carved value in order to organization makes sense,
- 3) amazing ability to improvise.

Resilience of a company is defined as the ability to reduce their vulnerability, increase the ability to change and adapt, and the capacity for a rapid recovery following discontinuation. With definition it is possible to determine the data for the assessment resilience of business (IEEE, 2010, pp. 587-592):

- 1) the ability of a company to reduce the level of vulnerability of the expected and unexpected events,

- 2) ability to change and adapt to changes in the environment,
- 3) ability to recover as soon as possible during business interruption.

According to Blythe (2009, pp. 6-7) resilience of the company includes financial risk, risk of liability, reputational risk and physical risk. Each risk group must be managed with proper quality if the company strives to maintain resilience.

### **3.1. Studies associated with resilience of companies to crisis situations**

Karim (2011, pp. 183–192) conducted a study in which he quantified six variables that affect the modeling business continuity while dealing with business disaster. Karim's study presented conceptual design of planning business continuity so that the statistical indicators analyzed the aptness of enterprises to deal with the emergence of business disasters. This research is important for identifying steps significant for the successful preparation of company for all types of emergencies. The study measured the impact of strategic management, analysis of business risks, resource planning business continuity, training, documentation, business plans and the management of circulating information.

In addition to Karim, the impact of strategic management on the business continuity planning was researched in the study of Mitroff, Pearson and Puchant (1992, pp. 235-260) who analyzed the parallel guidelines between strategic management and management of business confidence. Croy and Geis (2005, pp. 1-5) analyzed the business risk techniques that identify and evaluate risk factors that can compromise the success of projects and the achievement of goals. Connection between the training and the maintaining awareness of business continuity planning through the training related to the actual tests and exercises and the provision of expertise business continuity planning were analyzed by Maher and Zimmerman (2010, p. 10). Arminio and Truax (2005) explored the importance of management by circulating information and the research results suggest that it is important that records management and contingency plans are available and always ready in order to protect against crises.

The Karim's (2011, pp. 183–192) study has not proved the correlation between business continuity planning and documenting crises events. On the other hand, Kirschenbaum's (2006, pp. 54-55) research has recognized the importance of resources for the establishment of the model of business continuity. Croy's (2004, pp. 1-20) research has demonstrated that after identifying potential threats in order to ensuring business continuity we must document scenarios, which is contrary to Karim's research.

### **3.2. Example of measuring business resilience development in companies**

The business resilience development in companies was studied as a part of a survey questionnaire on a sample of 106 experts in business resilience in Croatia. Respondents answered with "Yes" or "No" to eight units which have form minimum 4 and maximum 8 questions. The responses were quantified through wages put in a scale from 1 to 5 (example, number 1 is share of answers Yes between 0 and 20%, and 5 is share of answers Yes between 80 and 100%). Table 1 shows the average value, standard deviation and coefficient of variation of business resilience development for natural disaster. The highest level of development (mean above three) was obtained for the first two questions.

Table 1: Development of business resilience for natural disaster (Kristo, 2015, p. 128)

1	In the company there is the implementation of management plans for business resilience				
Mean	3,13	St. deviation:	0,98	Coef. of variation	31,18%
2	Plans for business resilience includes assessing and controlling risk				
Mean	3,30	St. deviation:	1,06	Coef. of variation	32,15%
3	Plans for business resilience include business impact analysis				
Mean	2,75	St. deviation:	0,87	Coef. of variation	31,82%
4	Companie has developed strategies for business resilience				
Mean	2,93	St. deviation:	0,78	Coef. of variation	26,72%
5	The company develops and implements plans for business resilience				
Mean	2,87	St. deviation:	0,91	Coef. of variation	31,58%
6	In the company there are programs of developing awareness and training for business resilience				
Mean	1,92	St. deviation:	0,82	Coef. of variation	42,85%
7	The company has established maintenance plans and training business resilience plans				
Mean	2,18	St. deviation:	0,71	Coef. of variation	32,78%
8	The company has a department for public relations who conducts crisis communication.				
Mean	2,88	St. deviation:	0,89	Coef. of variation	30,97%

The total level of development of business resilience is the sum of the means for all eight issues of research. The maximum level of development of Business Resilience is 40 because the questionnaire contains eight questions, and each question can have the highest value-five. The potential for development is calculated as the difference between the maximum development and total level of development. It shows how companies may progress more in the development of business resilience with natural disasters. The total development of business resilience with natural emergencies is 21.96 which mean that the potential development is 18.04 (Chart 3).

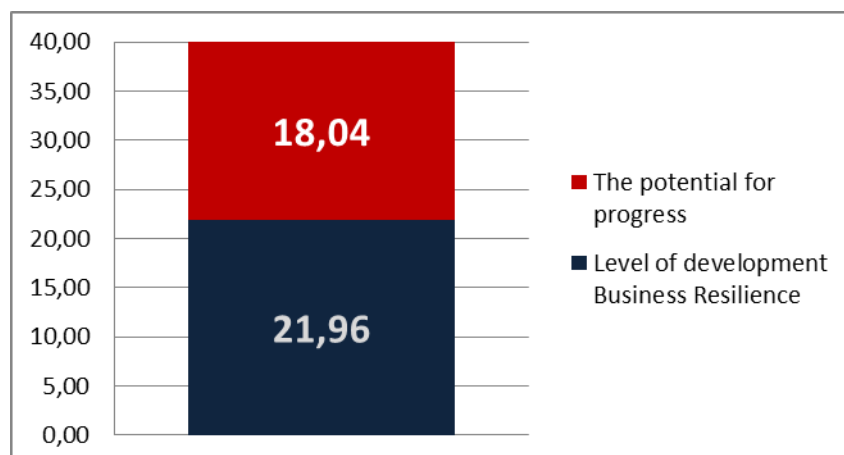


Chart 3: Business resilience for natural disaster (Kristo, 2015, p. 129)

The analysis of business resilience development by the company size shows that the total level of development is positively correlated with the size of the company, while the total potential to progress negatively correlated with the size of the company (Chart 4). In Croatia one of the indicators of qualifying companies as small, medium and big is the number of employees. Small companies have less than 50 employees, medium ones between 50 and 250 employees, and big companies have more than 250.

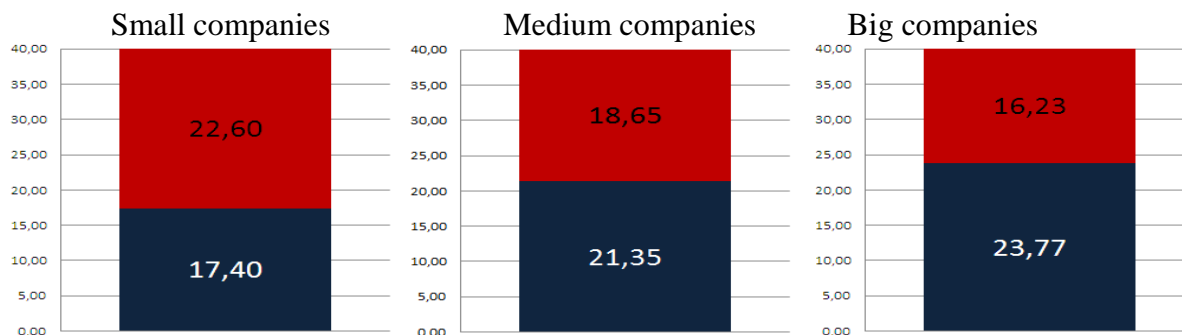


Chart 4: Business resilience for small, medium and big companies (Kristo, 2015, p. 129)

#### 4. CONSLUSION

Utility of the business resilience models to companies should not be put into question, and our focus must instead be how to increase marginal effect in functions of profit after occurrence of crisis situation. Positive effect is calculated as the difference between two functions of profit. First one is profit function with implemented business resilience models, and the second one is the profit function without implemented business resilience models.

Historical review of a topic is a great start when one intends to implement new models in to a company. For this reason, this paper presented three main reasons why the Catholic Church is the most resilient organization till now. Nowadays, resilient organizations must combine Catholic Church pillars of resilience and modern pillars of resilience such as: an ability of company to reduce vulnerability, ability to change and adapt, and ability to recover as soon as possible during business interruption.

The easiest explanation of a company's resilience is its ability to manage all groups of risks. Companies must find proper way of managing financial risks, liability risks, reputational risks and physical risks, and companies must not underestimate any risk group if they strive to maintain resilience. If a particular group of risk is not managed properly, apart from the risk of bankruptcy of companies this situation can be used by competitor companies take over our company or to take over part of the market.

For this reason is very important for companies is to quantifying level of business resilience, because that number can show how resilient a company is in comparison with competing companies. Presented model of measuring business resilience development in companies can be used for all crises situations, not only for natural disasters. Important part of the model is Chart 2 which presents total level of business resilience development and potential for progress. The goal of the companies should be to minimize potential for progress in business resilience.

#### LITERATURE

1. Arminio, T, i Truax, T. (2005) A team approach to emergency management. Disaster Recovery Journal, Vol. 18, No. 3.
2. Blyth, M. (2009) Business Continuity Management: Building an Effective Incident Management Plan. New Jersey: WILEY.

3. Blyth, M. (2009) *Business Continuity Management: Building an Effective Incident Management Plan*. New Jersey: WILEY.
4. Coutu (2002) How Resilience Works. *Harvard Business Review*, Vol. 80, No. 5.
5. Croy, M. (2004) The business value of data. *Disaster Recovery Journal*, Vol. 17, No. 3.
6. Croy, M., Geis, J. E. (2005) Acronym soup: BCP, DR, EBR—what does it all. *Disaster Recovery Journal*, Vol. 18, No. 3.
7. Drucker, P. (1993). *Managing in Turbulent Times*. New York: Harper & Row.
8. Hiles, A. (2010) *The Definitive Handbook of Business Continuity Management*. New York: John Wiley & Sons.
9. Karim J. A. (2011) Business Disaster Preparedness: An Empirical Study for measuring the Factors of Business Continuity to face Business Disaster, *International Journal of Business and Social Science*, Vol. 2, No. 18.
10. Kirschenbaum, A. (2006) The missing link in business continuity. *Disaster Recovery Journal*, Vol. 19, No. 4.
11. Kristo, M. (2015) *The impact of crises on business continuity development*. Zagreb: M. Kristo.
12. Livingston, G. (2011) *The definitive Guide to Business Continuity Planning*. San Diego: MIR3.
13. Low, S. P., Liu, J. Y., Sio, S. (2010) Business continuity management in large construction companies in Singapore. *Disaster Prevention Management*, Vol. 19, No. 2.
14. Maher, K., Zimmerman, A. (2005) In Katrina's wake: Gulf firms seek to assist workers, resume business. *The Wall Street Journal*, Vol. 32, No. 78.
15. Mitroff, I. I., Pearson, C., Puchant, T. C. (1992) Crisis management and strategic management: Similarities, differences and challenges. *Strategic Management*, Vol. 8, No. 1.
16. Quarantelli, E. L. (1999) The disaster recovery process: what we know and do not know from research. *Disaster Research Center*, Vol. 3, No. 4.

## THE MOBILE BROADBAND MARKET: A COMPARATIVE ANALYSIS

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### ABSTRACT

*The purpose of this paper is to analyse the mobile broadband market in Slovenia and in the European Union (EU). Mobile broadband is available to almost all households in Slovenia and major operators already offer LTE services with an estimated 90% coverage. A comparison with the EU shows that the Slovenian mobile broadband market is underdeveloped, with the Slovenian mobile broadband penetration rate (47%) more than 25 percentage points below the EU average. The analysis reveals that low mobile broadband penetration is due to lack of customer demand, which may be attributable to lack of mobile services and applications requiring higher speeds. Therefore, mobile operators should not offer only LTE technologies but also stimulate the provision of new and attractive high-speed mobile services and applications. In addition, stimulating improvement in the computer literacy of mobile subscribers may also trigger the demand for mobile broadband services.*

**Keywords:** demand, LTE, mobile broadband

### 1. INTRODUCTION

The revenues of telecom operators have decreased by 7% in the last four years. On the other hand, in the same period, mobile data services increased by 36% and accounted for 25% of total revenues in 2014 (EC, 2015c). In addition, mobile broadband is still one of the fastest-growing segments in terms of subscriptions in the telecommunications sector in the EU, despite the fact that growth has slowed in recent years.<sup>5</sup> However, mobile broadband remains the main strategic focus of mobile operators. In the last few years, tablets and especially smart phones have been the key drivers of demand for mobile broadband services (OECD, 2011). It is predicted that over the next four years, smart phone adoption in developed countries will reach 70-80% of all connections (GSMA, 2015). Furthermore, Lee et al. (2011) found that population density and multiple standardisation policy are the main triggers for initial mobile broadband diffusion.

Mobile broadband penetration in the EU exceeded 70% in 2014. On the upper edge is Finland with 131% penetration by mobile broadband. Despite that the majority of EU households still access the Internet by fixed broadband technologies, 8.3% EU households already use mobile broadband as their primary access technology (EC, 2015a; EC, 2015b).

Data reveal that mobile broadband is still complementary to fixed broadband services, which is confirmed also by the results of Lee et al. (2011) within OECD countries. On the other hand, Srinuan et al. (2012) found that, based on own-price and cross-price elasticities, mobile broadband is a product that substitutes for fixed broadband in Sweden. Moreover, the results of the study by Nakamura (2015) for Japan show that, if tethering, quality of services, and security became available through mobile Internet access, mobile and fixed broadband access services would become substitutes.

Even though mobile broadband is available to almost all households in Slovenia and major operators already offer LTE services, a comparison with the EU shows that the Slovenian

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<sup>5</sup> Mobile broadband includes Internet access to the third-generation technologies (3G). Additionally, it includes higher-speed mobile technologies such as HSPA and LTE (EC, 2013).

mobile broadband market is underdeveloped. The Slovenian mobile broadband penetration rate is more than 25 percentage points below the EU average (EC, 2015a).

Therefore, the aim of this paper is to analyse the mobile broadband market in Slovenia and in the EU. Furthermore, it seeks to explain why the Slovenian mobile broadband market is lagging behind the EU. The results of the analysis may be used by mobile broadband services providers as well as by policymakers to accelerate the growth of mobile broadband in Slovenia in the coming years.

This paper is structured as follows: Section 2 provides an overview of the mobile broadband market in Slovenia and in the EU; Section 3 describes the 4G (LTE) development; and Section 4 examines the consumer use of mobile broadband services. Finally, Section 5 briefly concludes the paper.

## 2. MOBILE BROADBAND MARKET

The mobile broadband penetration rate in Slovenia has been steadily growing over the last few years, reaching 47% in 2014, which is 25% percentage points below the EU average (Figure 1).<sup>6</sup>

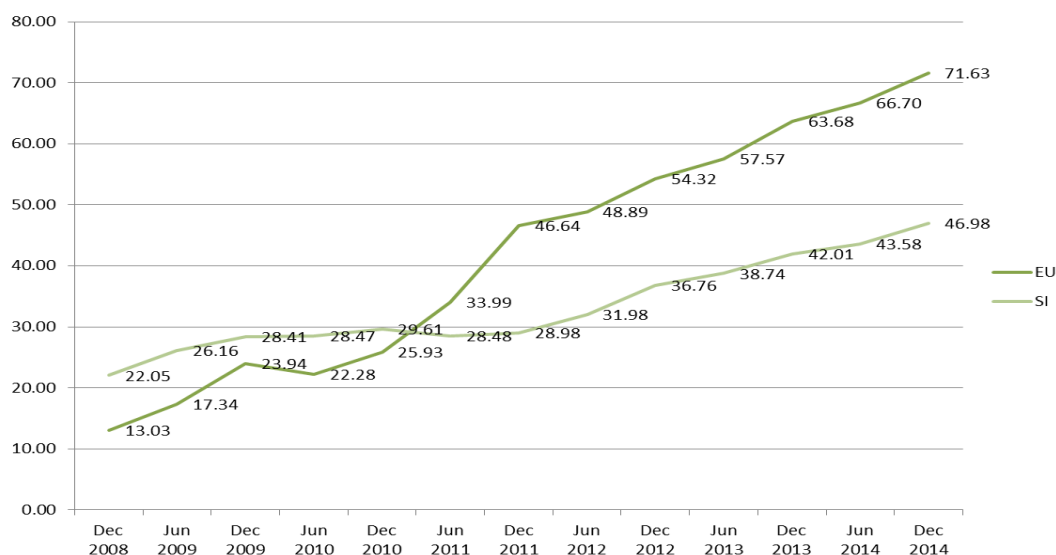


Figure 1: Mobile broadband penetration (subscriptions/100 people) (EC, 2015a)

The mobile broadband penetration country comparison in the EU reveals that the mobile broadband markets in the EU have been fragmented. On one hand, there are leading Nordic countries with more than 100% mobile broadband penetration (Finland, Denmark, Estonia and Sweden). On the other hand, there are only four countries including Slovenia with mobile broadband penetration below 50% (Slovenia, Portugal, Greece, and Hungary). In this group, Hungary appears last with only 34% of mobile broadband penetration rate. All other countries form the third group with a mobile broadband penetration rate between 54% (Romania) and up to 88% (United Kingdom) (Figure 2).

<sup>6</sup> The mobile broadband (HSPA network) was available to 99% of households in Slovenia at end of the 2014 (EC, 2014b).

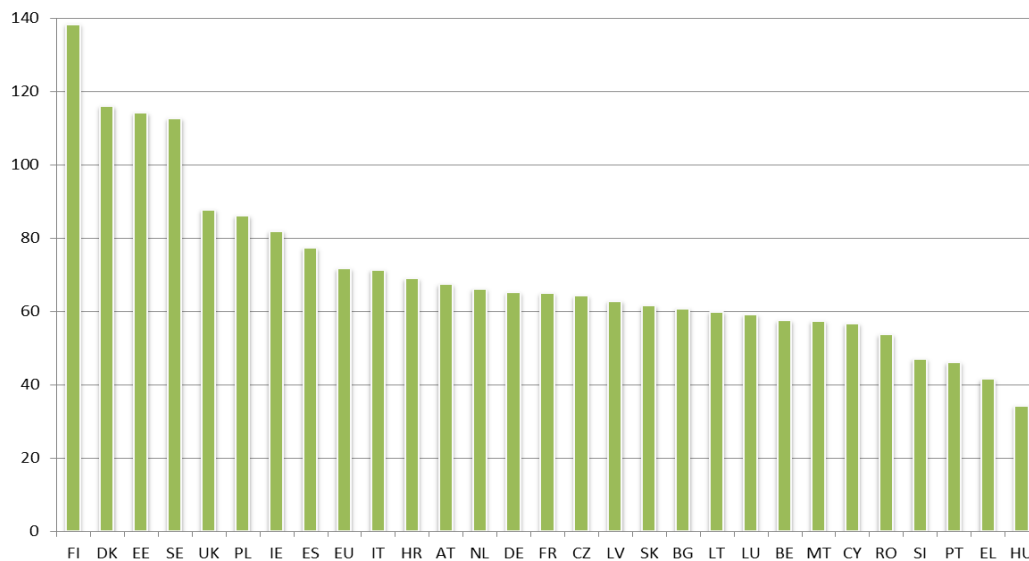


Figure 2: Mobile broadband penetration rate by country in EU (subscriptions/100 people) (EC, 2015a)

The incumbent mobile operator Telekom Slovenije<sup>7</sup> launched 3G services in December 2003. Despite that new mobile operators entered the mobile broadband market, Telekom Slovenije managed to retain almost half (44.9%) of the market by the end of 2014. Si.mobil had a 30.8% market share, followed by Tuš mobil with 11.9%. T-2 is ranked fourth with 6.8% market share, followed by Debitel with 4.3% market share and two minor players, Telemach<sup>8</sup> and Izi mobil, with 1.0% and 0.3% market shares, respectively (AKOS, 2015a).<sup>9</sup>

Furthermore, a comparison with the EU shows that the Slovenian mobile market is highly concentrated. The leading operator (Telekom Slovenije) has a market share of 48%, while the leading operators in the EU have a 35% market share on average (EC, 2014a). The average revenue per user in the retail mobile market was EUR 200, which is 17% more than in the EU (EC, 2015a).

### 3. LTE DEPLOYMENT

The LTE technology is the fourth generation (4G) of mobile telephony and is a considerably improved successor to 3G technology. LTE services enable much faster download speeds compared to the speeds of fixed broadband access.

LTE services in Slovenia were already offered by Si.mobil by the end of 2012, but with limited scope and only in larger towns. In March 2013, Telekom Slovenije followed with its own upgrading of the network with LTE technology (AKOS, 2014). However, the significant development of LTE is expected in the following years, since the regulator AKOS concluded the first spectrum auction in 2014, gaining EUR 149 million (AKOS, 2015b).<sup>10</sup> The winner of the auction was Simobil, followed by Telekom Slovenije and Tušmobil. Furthermore, Si.mobil also acquired the 800MHz spectrum with a special coverage obligation. Thus, Si.mobil is obliged to provide mobile broadband services of at least 10MBps to at least 95% of the population in the next 3 years (EC, 2014a; EC, 2014b; AKOS, 2015b). Hence, the LTE network

<sup>7</sup> At that time, the mobile services were actually offered by Mobitel, a daughter company of Telekom Slovenije.

<sup>8</sup> Telemach took over Tušmobil in 2015.

<sup>9</sup> Telekom Slovenije, Si.mobil, Tušmobil, and T-2 are infrastructure operators of mobile networks, while Debitel, Izimobil and Telemach are only service providers (AKOS, 2014).

<sup>10</sup> The following frequencies bands were offered: 800 MHz, 900 MHz, 1800 MHz, 2100 MHz and 2600 MHz (AKOS, 2015b).



could serve as an alternative technology to bridge the digital divide in rural areas. After the acquisition of Tušmobil in 2015, Telemach also began to rollout LTE services. The 4G (LTE) technology is currently available to 89.7% of households in Slovenia, which is more than 10 percentage points above the EU average (79.4%) (Figure 3). Moreover, the 4G (LTE) mobile broadband coverage comparison in the EU reveals that the mobile broadband markets in the EU have not been as fragmented as mobile broadband penetration. Almost all EU countries, with the exception of Cyprus, have already achieved at least 50% coverage with LTE. In addition, 18 EU countries have 75% or higher LTE coverage (Figure 3).

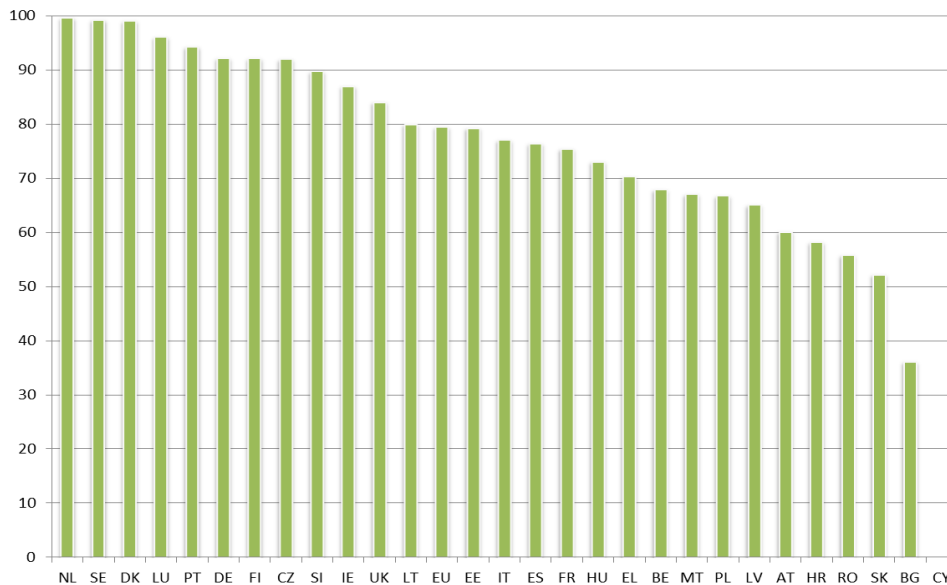


Figure 3: 4G mobile broadband (LTE) coverage (as a % of households) (EC, 2015a)

#### 4. USE OF MOBILE BROADBAND SERVICES

Internet consumers who access the Internet away from home or work used either their mobile network or a wireless network (e.g., Wi-Fi). They use portable computers, tablets, mobile phones, and smart phones to access the Internet on the move. Mobile Internet users are among heavy users since, in the EU, 64% of those who use portable computers and 80% of those who use mobile phones or smart phones access the Internet at least once a week (Eurostat, 2015). Furthermore, the share of Internet users accessing the Internet with a mobile phone or smart phone via a mobile network has increased by more than 22 percentage points since 2007, reaching 26.5% in 2012. The same pattern can be observed in Slovenia, which lagged behind the EU by 9 percentage points (EC, 2015a).

Figure 4. reveals that the level of computer skills is an important factor for the mobile use of the Internet. Namely, 40.8% and 30.4% of consumers with high computer skills use the Internet via a mobile network in the EU and Slovenia respectively. On the other hand, only 1.2% of consumers with no computer skills use mobile broadband. This clearly indicates that improving computer literacy must be one of the measures of mobile broadband policy.

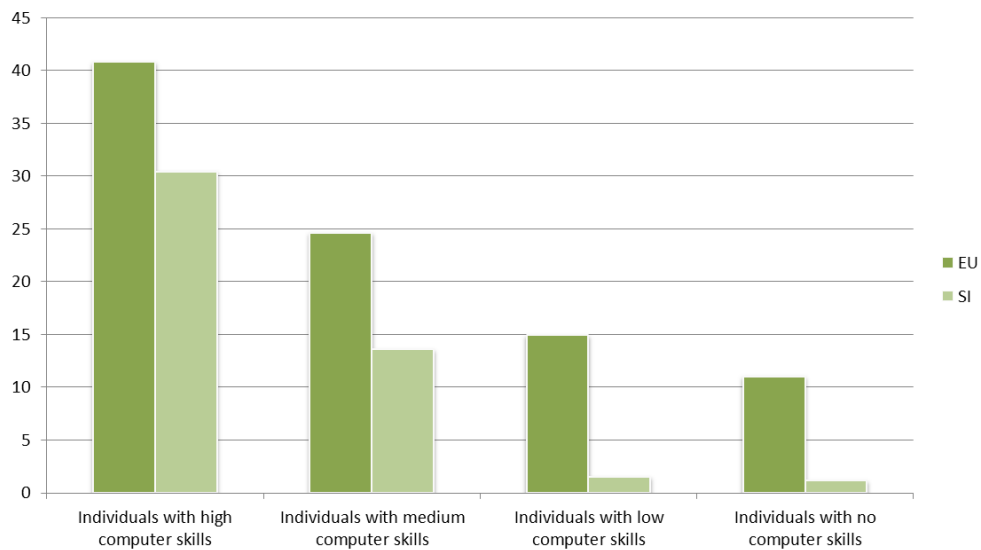


Figure 4: Individuals accessing the Internet through a mobile phone or smart phone via mobile network (UMTS, HSDPA) by computer skills (EC, 2015a)

One of the main drivers of mobile broadband adoption is also the young population, whereby 35% of people aged between 16 and 24 subscribe to mobile broadband in Slovenia. On the contrary, less than 5% of people aged between 55 and 74 use mobile broadband (Figure 5).

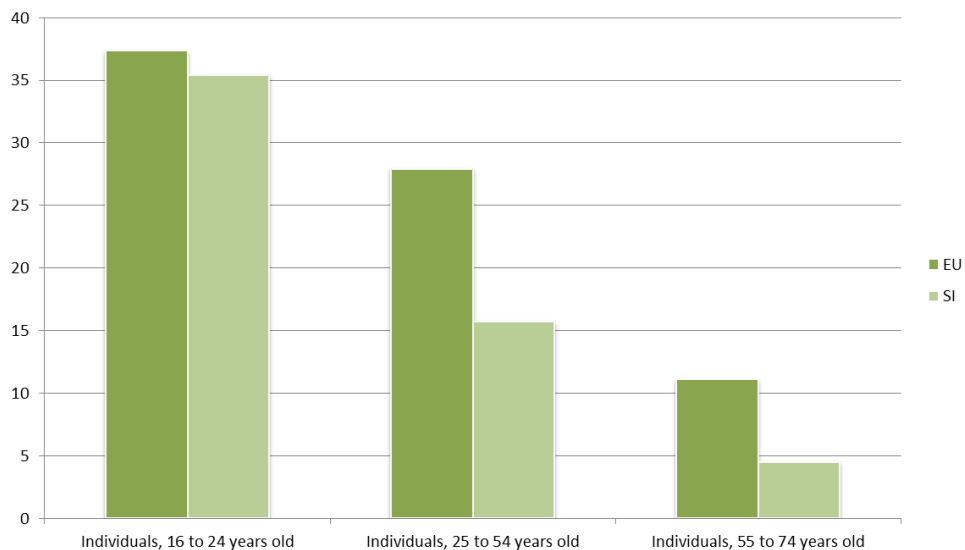


Figure 5: Individuals accessing the Internet through a mobile phone or smart phone via mobile network (UMTS, HSDPA) by age (EC, 2015a)

According to the Eurostat survey, the two main purposes of mobile use of the Internet in both Slovenia and the EU are receiving/sending e-mails and participating in social networks, which can also be accessed at lower speeds (Figure 6). In contrast, only 30% of consumers in Slovenia use the Internet on the move for downloading games, video, and music etc., which all require higher speeds; this is 14 percentage points below the EU average. In addition, users encountered several problems when using the Internet on the move. In particular, 38% and 32% reported frequent difficulties with their mobile network signal in the EU and Slovenia respectively (Eurostat, 2015). Nevertheless, it is expected that this issue will become less important after the upgrading of mobile networks with LTE technology.

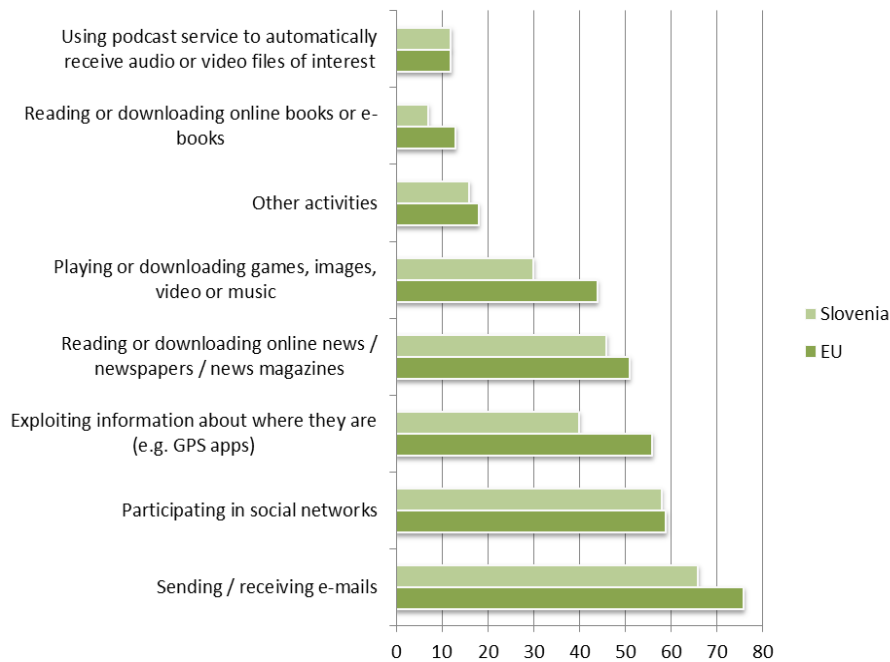


Figure 6: Purpose of the mobile Internet use (% of individuals who used a handheld device to access Internet)(Eurostat, 2015)

It can be observed that consumers do not use mobile broadband as soon as such Internet access is available. Furthermore, Figure 7 reveals reasons for not using mobile Internet. Overall, 87% of Internet users in Slovenia reported that they have no need for the Internet while on the move, which is comparable to the EU (79%). However, this clearly indicates a lack of new mobile services and applications. Nevertheless, it is evident that new technologies without new mobile services will not induce higher use by mobile consumers. The second most important factor reported is the high prices of mobile Internet services.

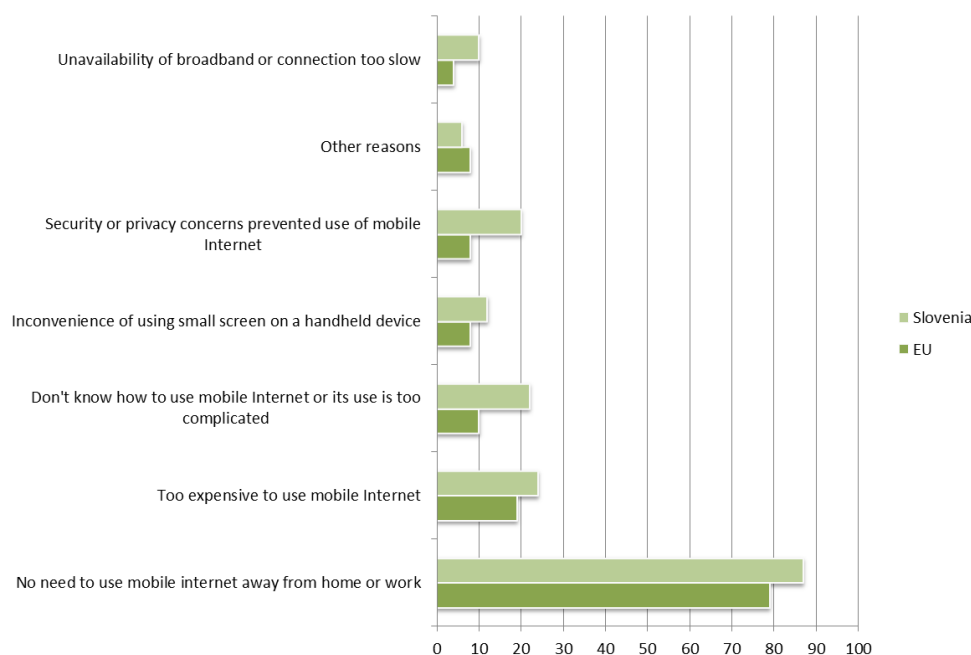


Figure 7: Reasons for not using the mobile Internet (% of individuals who didn't use a handheld device or portable computer to access Internet) (Eurostat, 2015)

## 5. CONCLUSION

Even though mobile broadband is available to almost all households in Slovenia and major operators already offer LTE services with an estimated 90% coverage, a comparison with the EU shows that the Slovenian mobile broadband market is underdeveloped. The Slovenian mobile broadband penetration rate is more than 25 percentage points below the EU average. The result of the analysis may be used by mobile broadband services providers as well as by policymakers to accelerate the growth of mobile broadband in Slovenia in the coming years. In particular, the analysis reveals that low mobile broadband penetration is due to lack of customer demand, which may be attributable to lack of mobile services and applications requiring higher speeds. Therefore, mobile operators should not offer only LTE technologies but also stimulate the provision of new and attractive high-speed mobile services and applications. In addition, stimulating improvement in the computer literacy of mobile subscribers may also trigger the demand for mobile broadband services.

## LITERATURE

1. AKOS (2014). *Annual report 2013*. Ljubljana: Agency for Communication Networks and Services of the Republic of Slovenia (AKOS).
2. AKOS (2015a). *Poročilo o razvoju trga elektronskih komunikacij za prvo četrtletje 2015* [Report on the development of the Slovenian electronic communications markets for the first quarter of 2015]. Ljubljana: Agency for Communication Networks and Services of the Republic of Slovenia (AKOS).
3. AKOS (2015b). 4G. Retrieved October 20, 2015, from <http://www.akos-rs.si/radio-4g-2558>.
4. EC (2013). *Broadband Internet access cost (BIAC) 2013*. Final report. Luxembourg: Publications Office of the European Union.
5. EC (2014a). *Implementation Report – Slovenia*. Retrieved October 20, 2015, from <https://ec.europa.eu/digital-agenda/en/news/2014-report-implementation-eu-regulatory-framework-electronic-communications>.

6. EC (2014b). Market developments -Slovenia. Retrieved October 20, 2015, from [http://www.google.si/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CCkQFjABahUKEwiCiObQjdnHAhUGlCwKHbYDDIk&url=http%3A%2F%2Fec.europa.eu%2Fnewsroom%2Fdae%2Fdocument.cfm%3Fdoc\\_id%3D9897&usg=AFQjCNEJxt4UCk033xklvESof1q41BPffw&sig2=PaUwk5M5HtnqU9\\_Y\\_f5Llw](http://www.google.si/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CCkQFjABahUKEwiCiObQjdnHAhUGlCwKHbYDDIk&url=http%3A%2F%2Fec.europa.eu%2Fnewsroom%2Fdae%2Fdocument.cfm%3Fdoc_id%3D9897&usg=AFQjCNEJxt4UCk033xklvESof1q41BPffw&sig2=PaUwk5M5HtnqU9_Y_f5Llw).
7. EC (2015a). *Digital Agenda key indicators*. Retrieved October 20, 2015, from [http://digital-agenda-data.eu/charts/analyse-one-indicator-and-compare-countries#chart={\"indicator-group\":\"mobile\",\"indicator\":\"mbb\\_penet\",\"breakdown\":\"TOTAL\\_MBB\",\"unit-measure\":\"subs\\_per\\_100\\_pop\",\"ref-area\":\[\]}\]](http://digital-agenda-data.eu/charts/analyse-one-indicator-and-compare-countries#chart={\).
8. EC (2015b). Broadband markets. Retrieved October 20, 2015, from <https://ec.europa.eu/digital-agenda/en/news/scoreboard-2014-trends-european-broadband-markets-2014>.
9. EC (2015c). Connectivity: Broadband market developments in the EU. Digital Agenda Scoreboard 2015. Retrieved October 20, 2015, from <https://ec.europa.eu/digital-agenda/en/download-scoreboard-reports>.
10. Eurostat (2015). *Mobile use of internet*. Retrieved October 20, 2015, from <http://ec.europa.eu/eurostat/web/information-society/data/database>.
11. GSMA (2015). The Mobile Economy 2015. GSMA. Retrieved October 20, 2015, from <http://gsmamobileeconomy.com/global/>.
12. Lee, S., Marcu, M., & Lee, S. (2011). An empirical analysis of fixed and mobile broadband diffusion. *Information Economics and Policy*, 23(3), 227-233.
13. Nakamura, A. (2015). Mobile and fixed broadband access services substitution in Japan considering new broadband features. *Telecommunications Policy*, 39(2), 140-154.
14. OECD (2011). *Fixed and wireless broadband*. In OECD Science, Technology and Industry Scoreboard 2011, OECD Publishing.
15. Srinuan, P., Srinuan, C., & Bohlin, E. (2012). Fixed and mobile broadband substitution in Sweden. *Telecommunications Policy*, 36(3), 237-251.

## THE CONFIGURATION OF LABOR MARKET IN ALBANIA AND ITS CHALLENGES

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### **ABSTRACT**

*When the economy goes in recession, the necessity of state intervention for its regulation becomes inevitable. Often, the monetary and fiscal policies undertaken by the government with the aim to achieve this target, may result with different economic configuration, probably undesirable. That's by the other steps undertaken in the priority economic sectors. Actually, the Albanian government has taken some measure in order to reduce the informal economy (focused especially on business agent) and to regulate the market labor in the country.*

*As any reforms, the effectiveness of those initiatives will be seen after some years, but actually, some questions bring in mind: what is the impact of those in the economic performance of the agents (business-employee), and can improve their conditions? Is the labor market in able to handle the initiatives and have been those in the appropriate levels? How are the actual report private employment and state employment, and has been rise the employment rate during this time? Is the possibility that higher employment rate will be a good indicator for the improvement of the economic welfare? The configuration of the labor market in the country and its challenges will be the focus of this article.*

**Keywords:** Labor Market, Mobility Employment, Rate of Employment

### **1. INTRODUCTION**

It is obviously to say that private sector remain the promoter of country's economic development. The economics agree with the fact that labor market is the main source that contributes in the economy growth (Kydland, 1995). But, the relationships configured in the environments of the firms (especially those that stresses the relation between manager-worker), and outside of firms (such as political environment, legal and cultural), can multiply positively or not the economic growth of the country. Many scientists have focused their works in order to know the possible correlation between many variables of labor market and the growth of economy. They have seen the problem in the microeconomic view (Kydland and Prescott, 1982) based in labor productivity and working hours or (Abdel Mowla in Russia 2011) the job search like a process that is essential in labor market. (Smirnova, 2003) appoints that sometimes is not enough only to search job rather that the intensity to search it. Today, internet is stressed like a variable that influence a lot in the rate of employment (Paik, 2008). Anyway, the microeconomic aspect of labor market, in many working paper, connect the rate of employment with the total utility of the consumer, with the aim that the last variable be maximized, using the linear methods. The problems are also viewed in the macroeconomic aspects, trying to see the impact of labor market in the growth of economy. So, knowing the effect of fiscal politics (especially those, because have to do directly on the above relationships), the economics are trying to be focused on the correlation between for example: unemployment, education, foreign investments, gender criteria, level of taxation on the wages etc. Some of those criteria will be on the focus of the article, configuring the labor market of Albania. So, it's challenges and the appreciate steps to do in order to reduce the problems. The level of the economy is a variable that must bring in mind, but the country faces also the overall economic performance of the other countries, with which has to do. Taking this fact in consideration is also necessary. Meanwhile, trying to answer the below questions, we will see the relation between the labor market in the country and its overall performance's economy.

## 2. THE METHODOLOGY

The primary data gathered by the different official institutions, inside and outside the country, like IMF, INSTAT, IOM, Bank of Albania, etc, are used for the article. The most useful data are taken by the LFS (Labor force Survey) for the respective years from 2000-2014. The LFS is a survey based on family and the sample is 7.450 families. The aim is to see the possible correlation among the variables like: wages, GDP, inflation, the labor-business freedom, how those influenced each other and how can be the trend in the future. As the wages, which probably will be determined by the equilibrium of the respective labor market according to the different skills and professions, are a not absolute indicator of the standard living of peoples, however, as a result of the process in every specific labor market and also by all the economy, will be the variable that can tell something about both of them.

Sure that, every specific labor market has its characteristics, strongly depending by:

- The level of education of the supply labor
- The required skills of labor demand
- The business level taxation
- The freedom of market and its regulation
- The level of doing business in Albania
- The efficiency of social programs in respective labor market etc.

So in this aspect, taking into consideration the average variables, the main hypotheses are:

- The average wage is very dependent by the growth of the economy;
- The average wage is very dependent by the report that exist between market freedom and labor freedom

## 3. SOME ASPECTS OF LABOR MARKET AND THE ECONOMY OF ALBANIA.

Our country is faced with very massive change during this time, from a centralized economy to an almost liberal labor market. The first phase of this long process of transition, has found the labor force of population not in able to fits the respective skills required by the free labor market. The rate of unemployment was very high due to especially frictional unemployment and structural unemployment. The reasons were:

- Labor force was specialized by some specific skills that the time required, inside the country.
- The new concepts and skills of labor market, like marketing and management, have not been heard before during their education, so labor force was totally unprepared, resulting with a high rate of unemployment, also by the fact that the economy was almost destroyed.

Those reasons are comes true when we see that in 1991, the peoples that worked in public sector were 850.000 and in 2005 only 186.000. The employment rate on that time was decline with 3.56%. The trend continued to be decreasing. In 2005 the number was 176.731 people. During this time, 2002-2005, 80% of the worked people were by private sector. Among the factors that cased the decrease of employment rate was the mass privatization of the state economy. Also, the high rate of employment in private sector was by the agricultural private sector. The activities that contribute a lot in the employment of people, on that time but also today, are the sector like: 1-agriculture, 2-fishery, 3-forestry, 4-manufacturing industry, 5-trade, 6-construction, 7-health etc.

All those sectors are very important for the development of the country, but the composition of the labor force is change due to policies of people's education. Many young people have two or three diplomas and still are unemployed. Regards their skills, the financial sector, tourism sector, real estate sector contributes a lot in their employment. The rate of labor force participation, with the focus of 30-64 years, because that category is the most active, has going to be decreasing today (please see the Table 1). That category of labor force had its peak in 2011 with 76.7% and the employment rate was 68.2% (please see the Table 2). So, 8.5% of them were unemployed.

*Table 1: The participation rate of labor force during the time*

Labor force participation rate								
2007	2008	2009	2010	2011	2012	2013	2014	Age group
								<b>Albania</b>
50.1	41.6	45.6	44.3	54.8	46.6	38.7	41.9	15-29
75.6	71.8	73.2	74.4	76.7	73.8	71.1	72.3	30-64
65.4	62.1	62.1	62.3	68.5	64.9	59.6	61.5	15-64
58.0	53.3	55.1	55.2	60.3	57.3	52.4	53.7	15+
								<b>Male</b>
57.1	48.2	52.5	51.6	62.2	54.1	47.9	51.2	15-29
86.5	84.1	87.2	86.3	85.2	84.2	82.9	84.5	30-64
74.7	72.4	73.5	72.3	76.4	73.4	70.2	72.2	15-64
66.9	61.7	64.9	64.0	67.9	65.5	61.7	63.5	15+
								<b>Female</b>
43.2	35.6	39.8	37.4	47.0	37.7	30.1	32.0	15-29
64.9	60.9	60.3	63.3	68.6	64.4	60.7	61.2	30-64
56.2	52.9	51.8	52.9	60.8	56.4	50.1	51.3	15-64
49.5	45.7	46.2	46.9	52.9	49.2	44.0	44.4	15+

Source: INSTAT, Albania 2015



Table 2: The employment rate during the time

Employment rate								Age group
2007	2008	2009	2010	2011	2012	2013	2014	
								<b>Albania</b>
40.2	31.3	35.6	34.3	42.8	34.5	28.2	28.2	15-29
67.5	64.6	65.6	66.4	68.2	66.4	61.8	62.7	30-64
56.6	53.9	53.5	53.5	58.7	55.9	49.9	50.5	15-64
50.3	46.3	47.5	47.5	51.9	49.6	44.1	44.3	15+
								<b>Male</b>
44.1	35.9	41.1	39.3	48.0	38.8	33.7	33.0	15-29
77.2	76.5	79.8	79.2	76.7	75.4	70.8	72.7	30-64
64.0	63.3	64.5	63.1	65.7	62.2	57.3	58.0	15-64
57.3	54.0	57.0	55.9	58.6	55.9	50.7	51.4	15+
								<b>Female</b>
36.4	27.2	31.0	29.6	37.3	29.4	23.0	23.3	15-29
58.0	54.1	52.5	54.4	60.1	58.3	53.9	53.6	30-64
49.3	45.6	43.6	44.5	51.8	49.6	43.1	43.4	15-64
43.4	39.4	38.9	39.5	45.3	43.5	38.0	37.6	15+

Source: INSTAT, Albania 2015

That time, the country was not influenced so much by the European crisis and Albania was a preferred country by FDI (Foreign Direct Investment) and some specific sector of economy had a positive rate of growth, like construction, due to also of fiscal policies and liberal administrative procedures. This is easy to bring in mind, if we see the composition of economy. It's important to know who are the most productive sector in economy. Although the labor market, especially in construction sector, faced to be informal (the number of employees are not so real in order to avoid the taxes), the rate of employment in the country was higher in 2009 with a coefficient 0.844, following by Transport and Communication sector with the peak in 2011. Its coefficient was 0.657. These coefficients are calculating, taking in consideration the ratio of the number's people who works in that sector, in the respective year, with the total of peoples employees in the Albanian economy. The interesting fact is that, regards the gender of the Albanian labor force, the number of male employed attempt to be higher in the 2009 (the boom of construction) and the rate of women employed in 2011 year (the sector of service with the growth of bank sector, telecommunication , trade etc, have make the difference , I think, in that gender ratio.) Although, the most of people have a higher education, the labor market "prefer" the women regards the man (please see the Table 3 and Figure 1). This shows another problem, stressing so social cost, meanwhile the construction is a sector that not required a lot of skills.

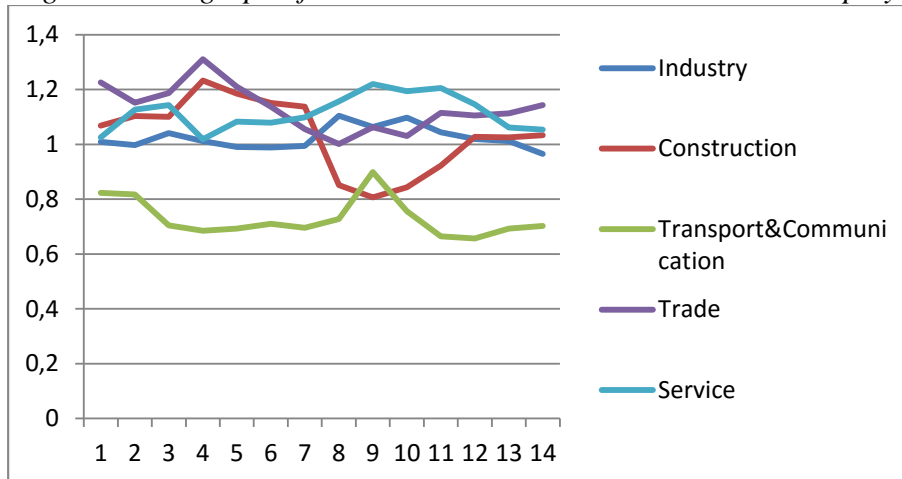
Table 3: The contribution of the economic sectors in Albania regards the employment

Economic Activity	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Industry	1.009	0.998	1.041	1.012	0.991	0.989	0.995	1.105	1.064	1.098	1.044	1.02	1.012	0.965
Construction	1.069	1.104	1.101	1.233	1.185	1.151	1.138	0.852	0.807	0.844	0.923	1.028	1.026	1.034
Transport&Communication	0.823	0.817	0.705	0.685	0.693	0.71	0.696	0.728	0.899	0.756	0.665	0.657	0.693	0.703

Trade	1.226	1.152	1.187	1.311	1.211	1.138	1.056	1.001	1.063	1.031	1.115	1.106	1.113	1.144
Service	1.026	1.127	1.144	1.019	1.083	1.079	1.099	1.157	1.22	1.194	1.206	1.146	1.062	1.054

Source: INSTAT, Albania 2015

Figure 1: The graph of the sector that contributes a lot in the employment rate



Source: INSTAT, Albania 2015

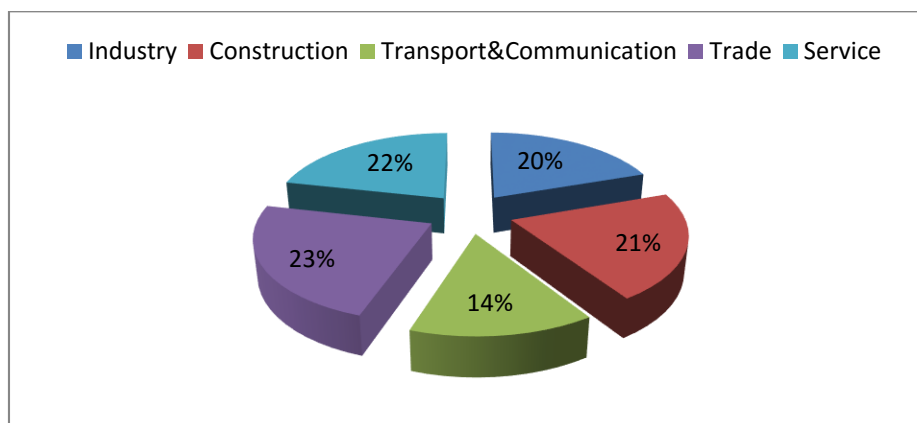
Focusing in their average monthly wage, the sectors with the most distributions of the wages are trade and service with 22% in total. This is also in the same thoughts mentioned before. (Please see the Table 4 and Figure 2).

Table 4: The trend of average monthly wage and official minimum wage

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Description
14,963	17,218	19,659	21,325	24,393	26,808	28,822	33,750	36,537	40,874	43,625	46,665	50,092	52,150	53,025	Average monthly wage
7,000	7,580	9,400	10,060	10,080	11,800	14,000	14,000	17,000	18,000	19,000	20,000	21,000	22,000	22,000	Official minimum wage

Source: INSTAT, Albania 2015

Figure 2: The distribution of the wages in the different sector for the 2014 year



Source: INSTAT, Albania 2015

The average monthly wage has a positive rate of growth, approximately 14.2% per year. The high rate was in 2009 and 2011, meanwhile the rate of official minimum wage is very low almost 5% per year. From 2013 and now, that variable has remain constant (please see the Table 4).

During that time, many things had happened. With the objective to reduce the informal economy, in all the sector, also in the production markets factors, the government has implemented many steps of a fiscal policy, which has produce many debates.

Those steps are undertaken with the aim to increase the long term rate of the economy growth. How can be the relationships among some variables that can show us if the economy has some probability to grow, the standard of living etc. This point of view will be the focus of next issue.

#### 4. THE RELATION AMONG LABOR MARKET AND GROWTH ECONOMY.

The variables that are take in consideration for the growth of economy are real GDP (in %), the rate of inflation, market freedom, labor freedom, business freedom. Those are the independent variables. In order to reduce their number, I have taken another variable which is the ratio of business freedom and labor freedom. This new variable is better, I think, because shows the possibility of doing business in Albania, also the possibility of the labor market to response the business. This relation can be seen in vice versa. As dependent variable is take the average wage. The reason is that the average wage can show better the purchasing power of consumers, so the standard of living (Please see the Table 5 below). In order that the variables have the normal distribution I have take the log of them, trying to show the possible regression with the coefficient  $\alpha=0.05$

The main hypotheses to be tested are:

- The average wage is very dependent by the growth of the economy;
- The average wage is very dependent by the report that exist between market freedom and labor freedom;

Table 5. – Data

Year/variables	W mes	GDP	inflation	Market freedom	Labor freedom	Business freedom	% B/L
2005	0.44			60.2	49	55	12.2
2006	0.48	4.1	4.4	62.4	50.2	54.3	8.16
2007	0.41	3.9	5	72	49.7	64.1	28.9
2008	0.46	1.5	9	75.8	49.5	55.6	12.3
2009	0.44	-2.1	2.9	75.8	47.2	67	41.9
2010	0.43	4.1	3.5	85.8	52.1	68	30.5
2011	0.42	2.8	5	79.8	50.4	67.1	33.1
2012	0.41	2.2	3.7	79.8	51	78.2	53.3
2013	0.42	2.4	2.6	79.8	49	81	65.3
2014	0.41	2.5	2.5	87.5	49.7	78.1	57.1
2015				87.8	52.9	70.6	33.4

Source: Bank of Albania and Heritage

#### Regression Equation

$$\ln wmes = -0.13118 - 0.0574362 \ln GDP - 0.0814529 \ln inf - 0.109047 \ln b/pune$$

8 cases used, 3 cases contain missing values

#### Coefficients

Term	Coef	SE Coef	T	P
Constant	-0.131180	0.0440783	-2.97608	0.041
$\ln GDP$	-0.057436	0.0231069	-2.48568	0.068
$\ln inf$	-0.081453	0.0278901	-2.92049	0.043
$\ln b/pune$	-0.109047	0.0149637	-7.28741	0.002

#### Summary of Model

S = 0.00759206    R-Sq = 95.02%    **R-Sq(adj) = 91.28%**  
PRESS = 0.000759804    R-Sq(pred) = 83.59%

#### Analysis of Variance

Source	DF	Seq SS	Adj SS	Adj MS	F	P
Regression	3	0.0043983	0.0043983	0.0014661	25.4356	0.0045738
$\ln GDP$	1	0.0000044	0.0003561	0.0003561	6.1786	0.0677975
$\ln inf$	1	0.0013329	0.0004916	0.0004916	8.5293	<b>0.0432221</b>
$\ln b/pune$	1	0.0030610	0.0030610	0.0030610	53.1063	<b>0.0018846</b>
Error	4	0.0002306	0.0002306	0.0000576		
Total	7	0.0046288				

#### Fits and Diagnostics for Unusual Observations

No unusual observations

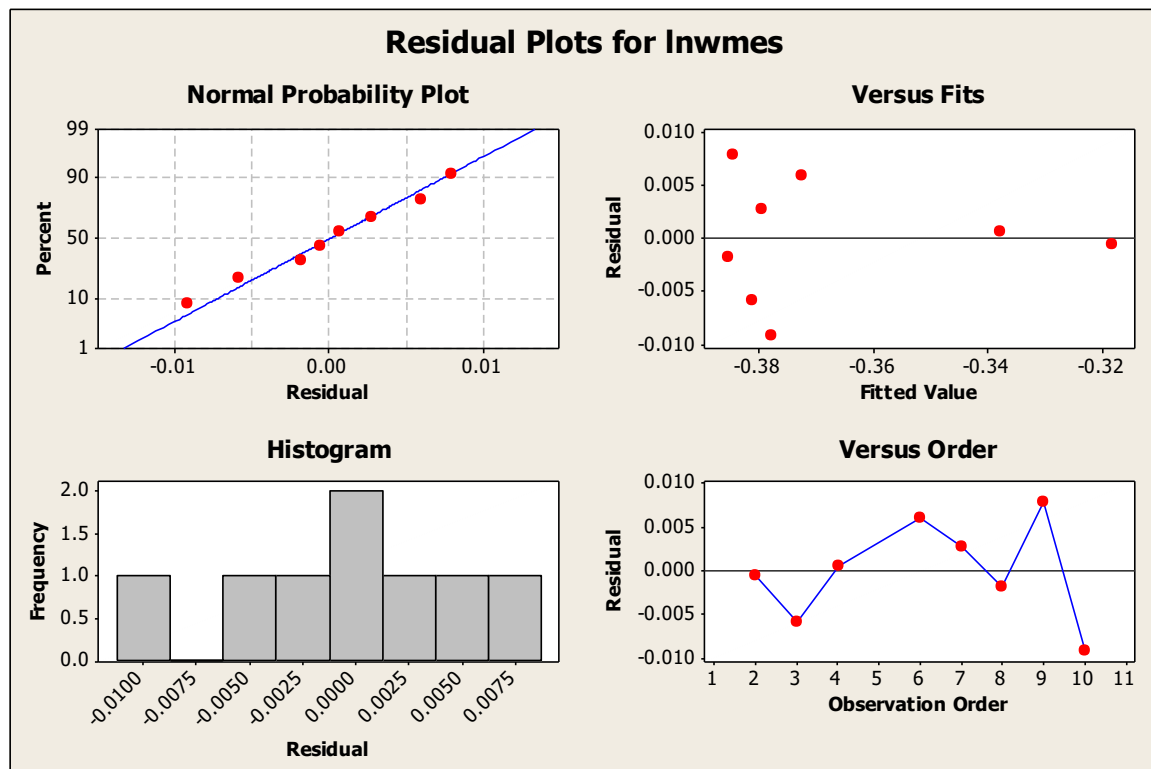
#### Durbin-Watson Statistic

Durbin-Watson statistic = 2.26136

According to the data, the model have a explication of the relation among the variables in 91.28% of cases and the ratio business freedom/labor freedom is the variable that have the significant impact on the dependent variable, the average wage ( $p=0.0018$ ). Also the variable inflation has an impact on average wage as the p value is 0.043. The correlation, in both of cases is negative, showing an interesting fact. (Please see the Figure 2 all in one)

According to the hypotheses, the wage is going to be influenced by inflation rate but not so much by the %GDP, showing not a good link between them, so the first hypotheses have to be rejected. By the business freedom and the labor freedom the dependent variable is influenced, so the second hypotheses is going to be accepted. All the data of the model are showed in the Figure 2.

Figure 2: The total graphs of regression model



Source: Own data

## 5. CONCLUSION

All those years, Albania has faced many problems regards the economy in total, and labor market in special. It's important that the business sector, which contributes a lot in the rate of employment in the country, have a good climate of doing business. The correlation between the wage and freedom of business and labor market shows the negative relationship –indicated that the factor's productivity of labor market must be in control.

The rate of inflation is necessary to decrease in order to perform better the average wage, according to the regression. Also, the rate of employment is been decrease in the recent years, showing that the economy is in recession. The fiscal reforms that tends to formalize the economy, seems to have a negative short run impact due to the psychological costs and as result, in the growth rate of employment.

The construction sector has been in stagnation, as a block process which does not leave the producer to construct buildings. The main reason is to build in that manner, not to damage the infrastructure. The rate of employment has been constant for almost 3 recent years, due to the service trade that shows a growth in the recent years.

A disturbing fact, is the ratio for the employment between woman and mans, also the different categories according to the age in the labor force. The data shows a discrimination in some specific sector, and presence of the new age (only 15 year) participating in labor force.

The education is a factor that must to bring in mind. Not only that good education results with high productivity, but I have not see the link between the education and the possibility of market to use that education. Peoples attempt to learn those skills that are not old fashion, but the economy is not configured in that manner to be in the same line with the education level of population. This is the main challenges of the labor market in Albania. If is clear where the economy will be focused (as industry economy or agricultural economy) the education must fit those objectives.

## LITERATURE

1. Bahl, Roy L., and Johannes F. Linn, 1992. *“Urban Public Finance in Developing Countries”*, Oxford University Press
2. Dhimitri, A, Ikonomi B, and Duka M, *“Regional Development Policy Performance in Albania*, The Fiscal Decentralization Initiative for Central and Eastern Europe
3. Eurobarometer *“European Employment and Social Policy”*, 2014
4. ETF, *“Country information note 2010-2012, Albania”*
5. Kuhn, Peter and Mikal Skuterund, *“Job Search Methods: Internet versus Traditional”*, Monthly Labor Review 125 (10):3-11
6. Kydland, F and Prescott, E *“Time to build and aggregate Fluctuations”*, Econometrica 50, 1345-1370
7. Peterman, N., Kennedy, J., 2003. *Enterprise education: influencing students perceptions on entrepreneurship*, *Entrepreneurship, Theory and Practice*, 28, 129-144.
8. Gjipali, A. *“A comparative Analysis of Labor Market development during transition in Central and East European Countries, with a focus in Albania”*,
9. Smirnova, N. *“Job search Behavior of Unemployed in Russia”*, Discussion Paper 13
10. Web site [www.minfin.gov.al](http://www.minfin.gov.al) of Finance Ministry of Albania.
11. Web site [www.tatime.org.al](http://www.tatime.org.al) of Tax Institution of Albania.
12. Web site [www.bankofalbania.gov.al](http://www.bankofalbania.gov.al)
13. OECD *“The informal Economy in Albania- Analysis and Policies Recommendations”*, 2004
14. Word Bank, *“Anti-corruption in Transition-a contribution to the policy debates”* ,2014  
Giovannoni F, Seidmann D, *“Corruption and Power in Democracies”*, Economics Department of Bristol University, February 2008

## FOREIGN DIRECT INVESTMENTS IN THE GLOBALIZING WORLD: THE MUTUAL LINK

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### **ABSTRACT**

*While Foreign Direct Investment (FDI)s play an important role as a key instrument in the course of globalization that have taken place at a great pace especially in recent years, globalization acts as a stimulus for FDI movements as well. Thus, there is a mutual relationship between the globalization and FDIs. While increasing FDI movements can make countries more global, getting more global increases FDI movements in those countries.*

*In this paper it has been pursued the goal of understanding the mutual relationship between the globalization and FDIs more clearly, and to satisfy this goal the factors that can affect the subject relationship have been studied and in the light of these factors, FDI movements in the globalizing world have been analyzed through a series of models that can reveal this mutual link. The paper emphasizes the importance of FDI movements in the globalizing world and the existence of the mutual link between them. However, it should not be forgotten that; while countries are deciding to take part in the globalization process or participating in FDI movements, they should absolutely take the potential positive and negative effects of both globalization and FDIs into consideration and should become more open to both only when the positive aspects outweigh the negative ones.*

**Keywords:** *Foreign Direct Investment, Globalization.*

### **1. INTRODUCTION**

In the process of globalization which gained momentum particularly in the last 25 years, Foreign Direct Investment (FDI)s plays an important role as a key policy tool. Significant increases in FDI movements recorded in the last few decades confirms this phenomenon<sup>11</sup>. In this context FDIs represent not only the multinationals but also the main investor countries in which those multinationals have strong ties. In this way, FDI movements have parallels with economic policies of the main investor countries. The fact that pioneer countries of globalization have substantial amounts of FDI movements<sup>12</sup> verifies this<sup>13</sup>. Moreover, globalization acts as a stimulus for FDI movements as well and it enables FDI attractiveness and usage in more global environments. However, the pickle here is to determine the direction of this mutual relationship, and it is not an easy task. A task is an iteration of the famous chicken and egg phenomenon. And the question that we are in search for an answer is almost an impossible one; which came first the chicken or the egg? Does globalization lead to more FDI movement participation or do FDIs serve the function to enhance globalization? The

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<sup>11</sup> The increasing FDI mobility in question makes it even more important to measure these movements. In measuring FDI movements, two distinct FDI values are being used. On one side, FDI flows (inflows-outflows) show FDI movements on yearly basis and FDI stock (inward-outward) shows accumulated FDI movements to a specific date on the other. United Nations Conference on Trade and Development (UNCTAD) defines FDI stock as "FDI stock is the value of the share of their capital and reserves (including retained profits) attributable to the parent enterprise, plus the net indebtedness of affiliates to the parent enterprise (UNCTAD, 2001, pp. 276; UN, 2007, pp. 344).

<sup>12</sup> FDI movements are composed of FDI inflows and outflows in a given year, in this sense it is the FDI volume (UNCTAD, 2010, pp.172).

<sup>13</sup> For instance, while the FDI stock volume in the U.S. was recorded as 1.27 trillion USD, it had reached to 11.73 trillion USD by the end of 2014 (UNCTAD, 2015).

relationship between FDIs and globalization can be perceived as a mutual process more often than not. While increasing FDI movements can make countries more global, getting more global increases participation in FDI movements in those countries. When FDI volume is considered, is it really possible to say that as FDI volume increases, countries get more global or as the countries get more global, FDI volume increases, or both? Finding the true direction of this relationship has motivated this study. Once the positive effects of globalization on world peace and expansion of the democracy are considered, the role of FDIs in this matter would become clearer. In this direction, FDI flows to an underdeveloped country in terms of democracy can grease the wheels of globalization, given that minimum institutional quality conditions - such as property rights - are met in that country. By this way, FDI movements would accelerate the better conditions to be established and would contribute to a more peaceful and democratic environment. Most of the ex-Soviet countries are such cases where this process takes place<sup>14</sup>. Following the World War II, while some countries - particularly those in the Soviet gravitational field - had adopted introvert economic policies and as a result had implemented sanctions on foreign investments and had used preventive measures against FDI movements, the others - more liberal ones - chose to follow extravert economic policies and adopted FDI encouraging and FDI attracting policies in their globalization processes. Following the dissolution of Soviet Union an important obstacle in the road of globalization had been overcome and worldwide FDI movements have increased along with the new globalization stream<sup>15</sup>. However, some inward FDI receiving governments were exposed to domestic political pressures in the form of protecting local producers and were criticized heavily regarding concerns about national security due to the negative effects of FDIs observed in the literature (e.g., Aitken and Harrison, 1999; Sarkar, 2007; Carkovic and Levine, 2002; Lyrouti, Papanastasiou, Vamvakidis, 2004). As a result of these internal political pressures, these governments have tended to take FDI inflow regulatory measures. 2000 onwards those measures in question and restrictions on FDIs have been eased (Golub, 2003), thus an environment which enables easy mobility and easy access of FDIs in most of the world have been created. In the process to reach such an environment the efforts put forward by many international organizations focusing on liberalizing foreign trade and internationally regulating FDIs have prominent effects on shaping the new world. In this paper it has been pursued the goal of understanding the mutual relationship between the globalization and FDIs more clearly, and to satisfy this goal the factors that can affect the subject relationship have been studied and in the light of these factors, FDI movements in the globalizing world have been analyzed through a series of models that can reveal this mutual link. As a result, this paper emphasizes the importance of FDI movements in the globalizing world and the existence of the mutual link between them. The remainder of the paper is structured as follows: In the next part globalization measures, the impact of globalization on FDI movements and vice versa and the current globalization trends and FDI movements are presented. The analysis to reveal the true direction of the relationship between FDIs and globalization takes place in the third section. Lastly, the paper is concluded and the policy implications are put forward in the final part.

## 2. GLOBALIZATION AND FDIs

Liberalization of FDI movements brought along many disputes. The main focal point of these disputes is the FDIs' potential to impair national control on resources in many countries.

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<sup>14</sup> For Transition Economies as it is defined by UNCTAD (2010) the total inward FDI stock was only 2.2 billion USD in 1991 following the dissolution of Soviet Union, whereas the figure had reached to 725 billion USD in 2014. The increase in inward FDI flows to those countries can also be interpreted as accelerated globalization process as well (UNCTAD, 2015).

<sup>15</sup> Worldwide FDI inward stock was around 2.2 trillion USD in 1990 and following the fall of Soviet empire it was 7.2 trillion USD in 2000 and it has reached to 24.6 trillion USD in 2014 (UNCTAD, 2015).



Moreover, FDI opposers abstain from its potential power to transfer local ownership rights to multinationals. Therefore, some countries chose to restrain FDI inflows. However, these restraints were eased off following the positive change in FDI perception worldwide in recent years into the direction that FDIs should be an important actor of development. The slack on FDI restraints facilitated FDI regulating agreements to take place in international business platforms (Golub, 2003). The main purpose of the international agreements is to establish an environment of mutual trust and by this way enhance the FDI attractiveness of host countries. Bounded by international agreements FDIs would carry more reassurance than any domestic policy would. This way participating in such agreements would increase FDI attractiveness of any potential host country directly proportional to the reliability of the agreement as they would increasingly become more foreign investor protectionist (Büthe and Milner, 2008; Büthe and Milner, 2011).

However, despite the significance of FDIs for the world economy, the international agreements regarding FDIs are not comprehensive enough, even though their quantity either mutual or regional has increased substantially from 1990s along with FDI movements. (Golub, 2003). In the struggle to attract more FDIs, along with participating international agreements, countries increasingly become more free from their prejudices in becoming full members to investor confidence booster organizations such as World Trade Organization (WTO). This way, participant countries would be able to offer reliable investment environments to foreign investors, thus would find an opportunity to attract more FDIs (Büthe and Milner, 2011).

Organisation for Economic Co-operation and Development (OECD) takes part as an important actor in the international agreements on FDIs and in the debates on the matter. Among the agreements in effect, Code of Liberalisation of Capital Movements by OECD is singled out by its high sanction power on FDI flows. Accordingly, parties who signed this agreement committed to concur the criteria on liberating FDIs (OECD, 2003). Also, in accord with the Declaration and Decisions on International Investment and Multinational Enterprises by OECD (OECD, 1976), 34 OECD member countries and 8 non-member participant countries reached an agreement on implementation of the national treatment principle<sup>16</sup> to all foreign based domestically operating firms and on encouraging domestic multinationals to increase their international investments (Golub, 2003).

Moreover, OECD initiated the Freedom of Investment initiative in an inter-government forum process since 2006. Bringing 50 governments together, the forum aims governments to share their knowledge and experiences about investment policies and thus attempts to facilitate more transparent and less discriminative investments policies to be adopted (OECD, 2006).

On the other side, WTO whose sole aim is to liberalize world trade, embodies many verdicts on international investments. Domestic additional cost limiting Trade Related Investment Measures (TRIM) and ownership rights protecting General Agreement on Trade in Services (GATS) fall within the body of WTO. Moreover, a similar forum to that of OECD's was established by WTO in 1996, named Working Group on the Relationship Between Trade and Investment (WTO, 1994a; WTO, 1994b; WTO, 1996; WTO, 2001; Golub, 2003).

Furthermore, Multilateral Investment Guarantee Agency (MIGA) attached to the World Bank Group by providing political risk insurance to investors, plays a role in proliferation of FDIs since 1988. Particularly MIGA aims to provide assistance to a healthy increase in FDI inflows to developing economies by insuring investors against political risks such as transfer limitations, violations of ownership rights, domestic turbulences, exchange rate risks and terror in those countries and by encouraging governments to pursue FDI attracting policies. Sanction power of MIGA is backed by the World Bank, thus in a possible dispute MIGA would have enforcement power to reconcile for both parties (The World Bank, 1988). In this direction,

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<sup>16</sup> National treatment principle is based on the application of all domestically applied taxes and other interventions to all producers indiscriminately within a country whether they are local or not (Seyidoğlu, 2009).

International Centre for Settlement of Investment Disputes of the World Bank Group also serves the same function as the centre takes on a negotiator role in disputes and therefore facilitate the FDI movements (The World Bank, 2010).

The remaining various multilateral international agreements - apart from the bilateral ones - generally lack the necessary sanction power and remain mostly regional. For instance, Framework Agreement on the Association of Southeast Asian Nations (ASEAN) Investment Area by ASEAN only has the sanction power to liberate investments within the association and have no enforcement whatsoever outside of it (ASEAN, 1998). Binding power of these types of agreements are open to debate, even if they would have sanction power to some level, they would most probably fall miles away from being global and instead would remain only regional at best.

While the regulations on FDIs may be different from one country to another; international agreements aim at establishing some standards on the matter. The regulations on FDIs are mostly regional and occasionally they are global; however, the factors obstruct FDI inflows are generally at country-specific levels. The main factors that limit FDI inflows are concentrated on restricting the foreign ownership on investments. In such cases, it is desired to keep foreign investors' ownership share in equity below a certain threshold (Golub, 2003). In FDI recipient countries due to national security and national sovereignty reasons, it is a common practice to take systematic measures in order to constrain foreign ownership in some primary areas of high importance such as telecommunication, transportation, finance and electricity distribution (Golub, 2009).

Institutional quality directed to protecting the ownership rights of foreign investors in host countries is indicated to be the most important factor in determining the expected returns for foreign investors. For host countries reveal weakness on protecting ownership rights and are exposed to extreme political instabilities, nationalization of foreign assets is a common practice. As a natural consequence, this practice as an FDI constraint, draws away foreign investors and decreases FDIs (Azzimonti and Sarte, 2007).

Compulsory surveillance and approval procedures and performance requirements monitoring the economic contribution of the FDIs are compatible with the host country interests in a protective manner; however, such practices would increase the costs to invest in that country and thus would cause sharp declines in FDI inflows (Golub, 2003). As one of the highest FDI inflow recipient countries in recent years, China and her policies against FDIs would be a good example in this subject. Prior to WTO membership, China's primary goal was to keep her exports at highest levels possible, and in order to attain that goal China imposed obligations on foreign investors such as local manufacturing above a certain threshold or partial exportation necessity. But, these obligations acted as a constraint on FDI inflows to the country and played an important role in the decline of FDIs in China. Following China's membership to WTO in 2001 (WTO, 2015), Chinese government in accordance with TRIM regulations not only have renounced the constraints but have implemented foreign trade promoter policies such as tax refund on exports also. As a result, substantial increases<sup>17</sup> in FDI inflows to the country was observed (Long, 2005).

Limitations in foreign employment and other operational constraints act as other strong disincentives for FDI inflows and could cause decreases in FDI inflows. Foreign employment limitations could be a deal breaker in many occasions for foreign investors. A foreign investor when facing with a limitation that constraints number of foreigners in his board of directors, would be afraid of losing the control power on the board and therefore would think twice about this investment. Again, if the investor faces a limitation on foreign workers, he might avoid the

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<sup>17</sup> Chinese inward FDI stock was only 20.7 billion USD in 2009 (Hong Kong, Taiwan and Macao excluded), however this figure jumped to 216.5 billion USD by 2002 following China's full membership to WTO in 2001 and has reached to roughly 1.1 trillion USD in 2014 (UNCTAD, 2015).

investment in the first place given that he would find no point in investing in a company that would lack sufficient amount of workers that have necessary technical information and skill-set. Additionally, country specific regulations would diminish the profitability of the foreign investors and by limiting their area of operations, that could cause FDI inflows to decrease (Golub, 2003).

FDIs directed to export oriented manufacturing sector are generally less prone to such restrictions, whereas FDIs aimed at services sector are more exposed to those constraints, despite the free mobility principle of capital in today's world (Golub, 2009). It has been put forward by many researchers (e.g., Marchick and Slaughter, 2008) that the limitations towards FDIs would hinder the free mobility of capital and thus would have detrimental effects at high level to FDI recipient host countries, FDI home countries and through the discrepancies they may cause to the global economy. On the other hand, some other researchers (e.g., Sun, 2002) asserted the necessity of preventive restraints in order to avert unfair practices of FDIs in local markets instead of prohibiting FDIs completely.

In another aspect, FDIs can expand existing common framework of regional collaboration organizations and can contribute to integration efforts of such organizations from a regional cooperation perspective. In this direction, in terms of FDI movement volume, it can be said that North American Free Trade Agreement (NAFTA) and European Union (EU) are one step further among the rest of the regional cooperation organizations. The FDI stock volume has reached to 16.9 trillion USD for EU and to 13.5 trillion USD for NAFTA in 2014<sup>18</sup>. Apart from that, Latin American Integration Association (LAIA) with 2.4 trillion USD, Southern Common Market (MERCOSUR) with 1.3 trillion USD, ASEAN with 2.5 trillion USD, Asia Pacific Trade Agreement (APTA) with 2.6 trillion USD and European Free Trade Association (EFTA) with 2.2 trillion USD worth FDI stock volume in 2014, are singled out among the regional cooperation organizations<sup>19</sup> (UNCTAD, 2015).

FDI movements in aforementioned organizations, on one side, facilitate regional integration for the member states in economic, social and cultural context through economic connections and opportunities to converge they provide and form a basis for global integration via contributing to globalization of those countries on the other side. Thus it can be said that, it would be much more easier to achieve global integration through regional integration in the first place, instead of attempting to globalize each and every individual country. Accordingly, FDI movements within regional cooperation organizations would play a key role in accomplishing regional integration, and this would lead to a more facilitated global integration<sup>20</sup>.

Moreover, FDIs can provide opportunities for global competitiveness and serve as stimulus for globalization (Sharma, 2012). So are FDIs just handy tools for globalization as many researchers have put forward (e.g., Freeman and Jackson, 2012; Dunning, 1995)? However, as the paper would test does increasing globalization mean accumulated FDI flows as well? The ability of globalization to strengthen the structure of host countries in a way that they would follow policies in accordance with the western governments could enable increased FDI flows as well at the same time (Walter, 1999). The direction of this relationship will be tested in the next section.

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<sup>18</sup> Inward FDI stock for EU has reached to 7.7 trillion USD in 2014 and to 6.4 trillion USD for NAFTA whereas outward FDI stock for EU has reached to 9.2 trillion USD and to 7.1 trillion USD for NAFTA in 2014 (UNCTAD, 2015).

<sup>19</sup> In 2014 inward FDI stock for LAIA has reached to 1.8 trillion USD, to 0.9 trillion USD for MERCOSUR, to 1.7 trillion USD for ASEAN, to 1.5 trillion USD for APTA and to 0.9 trillion USD for EFTA; whereas outward FDI stock in 2014 for LAIA has reached to 0.6 trillion USD, to 0.4 trillion USD for MERCOSUR, to 0.8 trillion USD for ASEAN, to 1.5 trillion USD for APTA and to 1.3 trillion USD for EFTA (UNCTAD, 2015).

<sup>20</sup> In this direction EU has freed all capital movements within the union in late 1980s (Golub, 2003).

The debates on how to measure globalization are still on. Researches (e.g., Dreher, 2006; Samimi, Lim and Buang, 2012; Vujakovic, 2010) choose different methods of measurement over time. Commonly various indices have been used in the literature (e.g., Randolph, 2001; Lopez-Claros, Porter, Sala-i Martin, Schwab, 2006; Gwartney and Lawson, 1996; Vujakovic, 2010). However most of the papers used either competitiveness or international openness in forming basis for their indices to measure globalization and all attempted to measure it through a different aspect (Lupu, 2013). Therefore it can be said that there is no consensus among researchers on how to measure the globalization.

In terms of simplicity, instead of the indices used in the literature yielding different results, this paper aims at measuring the globalization through a simple measure of openness to foreign trade. By using openness to foreign trade as a proxy to globalization this paper also attempts to simplify the measurement process of globalization. As it was used by many other researchers (e.g., Levine and Renelt, 1992; Sachs and Warner, 1995; Harrison, 1996; Brunner, 2003; Stiglitz, 2004; Krugman, 2007; Dollar and Kraay, 2004) in the existing literature openness to foreign trade is a common measure for globalization as well. The reasoning behind this choice is empirically backed by many studies that found out FDI work parallel with foreign trade (e.g., Polachek, Seiglie and Xiang, 2012).

For compatibility purposes, this paper focuses on FDI flow volume to present FDI movements in and out as total in a given year and openness to foreign trade as an indicator for globalization for that year. The analyses conducted in this paper covers the 1994-2014 period and the analyses were applied on low-income countries<sup>1</sup>, lower-middle-income<sup>2</sup>, upper-middle income countries<sup>3</sup> and upper-income countries<sup>4</sup> as the World Bank classifies<sup>21</sup>. The selection of the World Bank country classification is to reflect the interchangeability among FDI volume and globalization in the form of openness to trade. (The World Bank, 2015a).

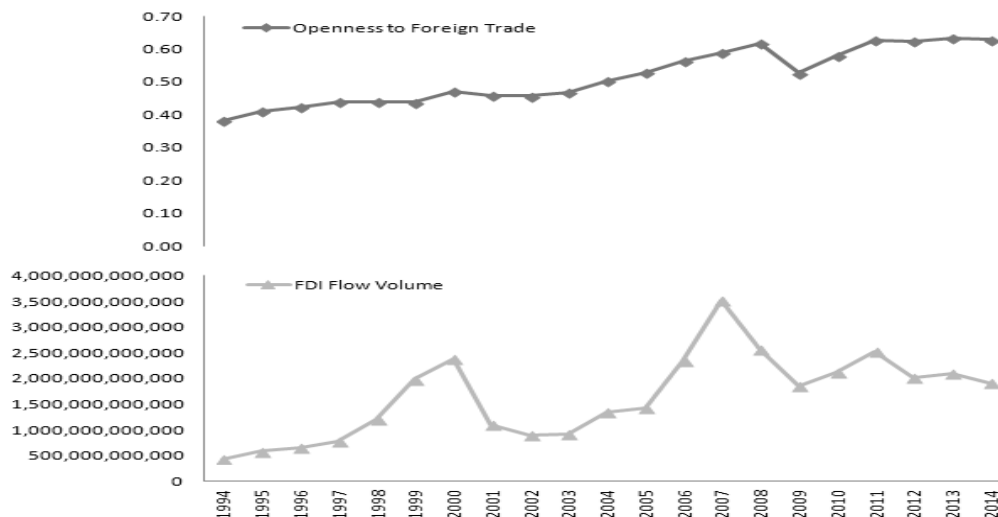
Today, FDI flow volume is 2.6 trillion USD a year, as of 2014 - 1.2 trillion USD inflow and 1.4 trillion USD outflow - and the FDI stock volume has reached to 49.2 trillion USD, 24.6 trillion USD of which is inward stock while the remaining 24.6 trillion USD part is the outward stock (UNCTAD, 2015). Openness to trade indicator for the world is 60% as of 2014. However, for the 1994-2014 period, the average openness to trade indicator for the world is 51% (The World Bank, 2015b).

In order provide an insight perspective, the linear relationship between the openness to foreign trade and FDI volume is presented for the country groups for the period 1994-2014. For high-income countries, the openness to foreign trade and FDI flow volume variables showed limited linear co-movement as shown in below Figure-1. It can also be seen from the figure that FDI volume is more fragile to fluctuations. The effects of 2007 global crisis can easily be observed in the figure. (UNCTAD, 2015; The World Bank, 2015b).

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<sup>21</sup> Income levels are used as indicators of development in the World Bank classification system through the Atlas calculation method of GNI per capita. Accordingly, countries with a GNI per capita of 1,045 USD or less are set for low-income countries, whereas countries with a GNI per capita of 1,045 USD to 4,125 USD are defined as lower-middle-income and economies with a GNI per capita of 4,125 USD to 12,736 USD are identified as upper-middle income countries. Upper-income countries are defined as those with a GNI per capita of 12,736 USD or more (The World Bank, 2015a; Gorgülü, 2015).

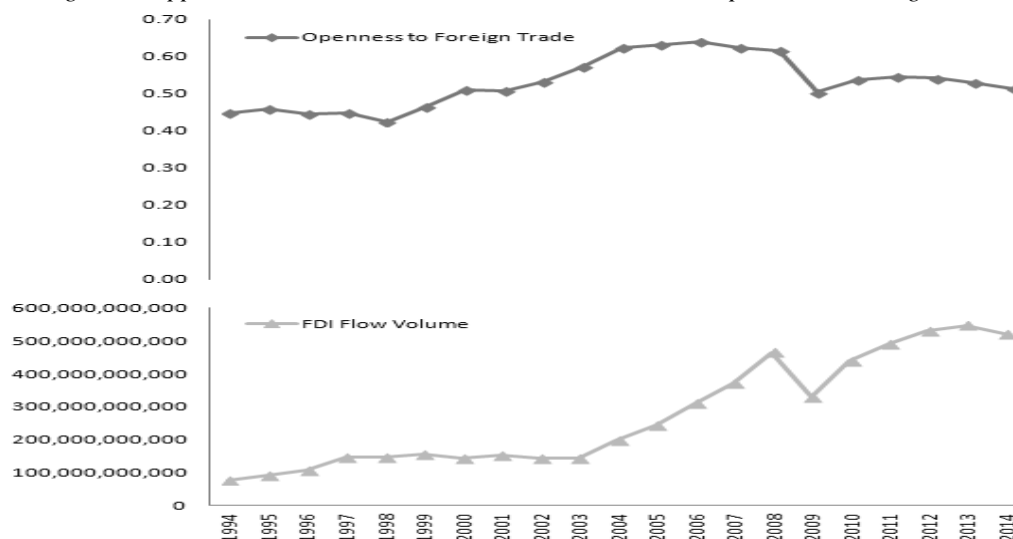
Figure 1: High-Income Countries FDI Flow Volume-Openness to Foreign Trade (1994-2014)



Sources: The World Bank, 2015b; UNCTAD, 2015.

However, the level of openness to foreign trade for high income countries remain relatively stable proving the fact that their elasticity against market fluctuations would be lesser than that of FDIs. The openness to foreign trade and FDI flow volume variables for the upper-middle-income countries exhibit a linear relationship as it can be observed in below Figure-2. Starting from early 2000s the two variables seem to move parallel to each other (UNCTAD, 2015; The World Bank, 2015b). This could be explained by the development processes that most of the countries in upper-middle income group undergo in 2000s given that most of the countries within this group are developing countries.

Figure 2: Upper-Middle-Income Countries FDI Flow Volume-Openness to Foreign Trade (1994-2014)

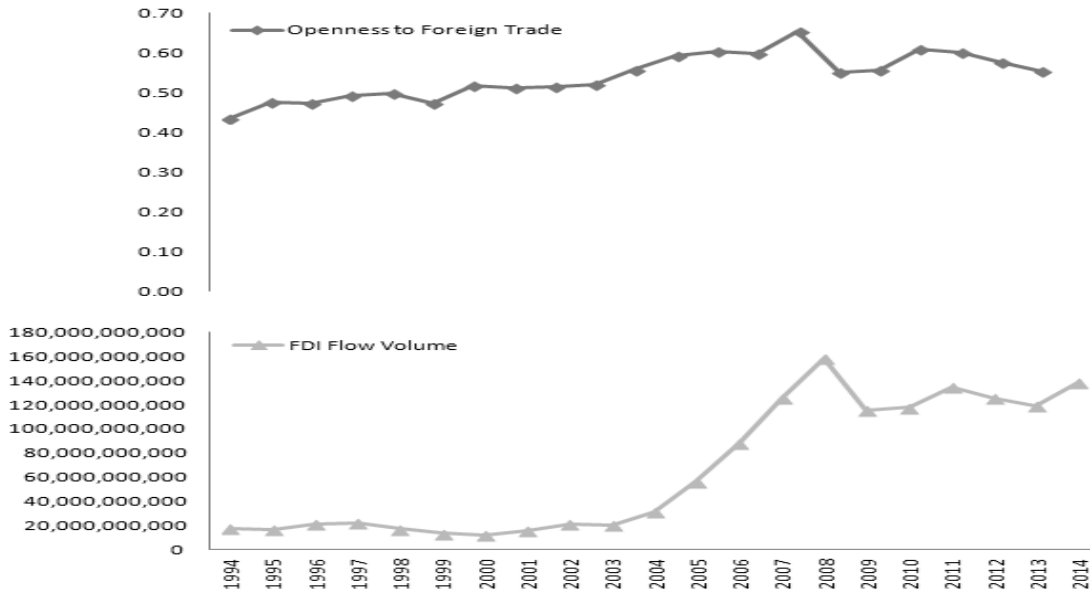


Sources: The World Bank, 2015b; UNCTAD, 2015.

For lower-middle-income countries, the linear relationship between the two variables are observable for the 1990s where lower-middle income countries were not really active FDI actors, and for the recovery period following 2007 global crisis as it can be seen in below Figure-3 (UNCTAD, 2015; The World Bank, 2015b). The sharp incline in FDI flow volume in mid 2000s till the 2007 global economic crisis can also be explained by the development efforts

of the countries in the group as again most of them are developing economies. One can also observe a similar incline that took place in upper-middle-income countries in mid 2000s. However, the slope for lower-middle-income countries is much more steeper than that of upper-middle-income countries.

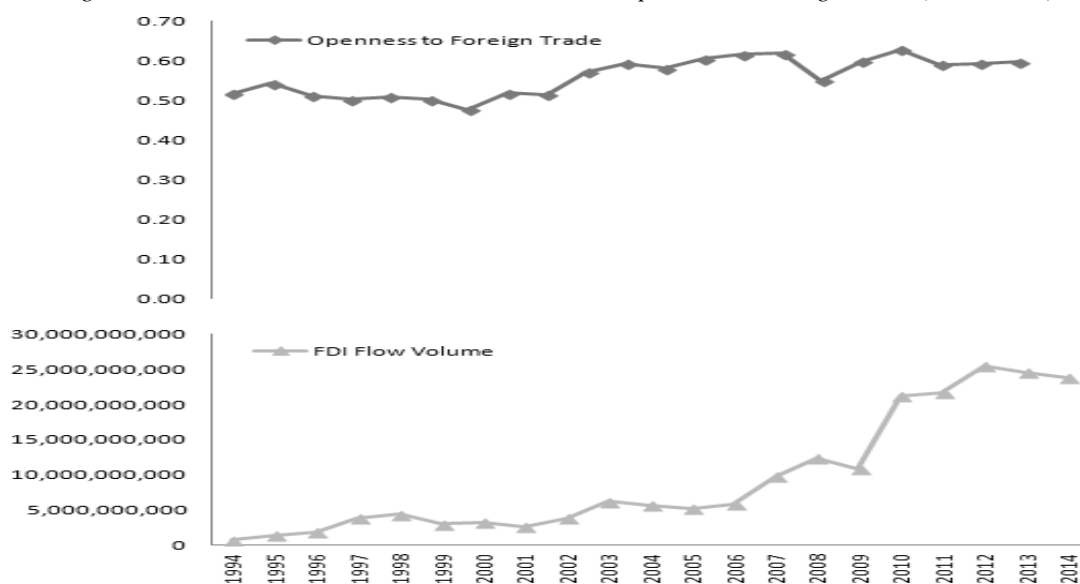
Figure 3: Lower-Middle-Income Countries FDI Flow Volume-Openness to Foreign Trade (1994-2014)



Sources: The World Bank, 2015b; UNCTAD, 2015.

Lastly, for low-income countries, the openness to foreign trade and FDI flow volume variables exhibit co-movement. However, it is also observable that the elasticity of FDI's are higher in low income countries as shown in below Figure-4 due to the fact that FDI's took a great share in GDPs of those underdeveloped countries (UNCTAD, 2015; The World Bank, 2015b). Thus, making them fragile to market fluctuations.

Figure 4: Low-Income Countries FDI Flow Volume-Openness to Foreign Trade (1994-2014)



Sources: The World Bank, 2015b; UNCTAD, 2015.

One important finding from the linear relationships is that interestingly on average -between 1994 and 2014- lower income countries turned out to be the most open to foreign trade whereas high income countries came on the least.

### 3. THE MUTUAL LINK

FDI flow volume is composed of inward FDI flows and outward FDI flows in a given year, whereas openness to foreign trade variable shows the level of foreign trade participation of the host countries. Openness to foreign trade is obtained through the accumulation of current exports and imports and division of this sum to the GDP of a country in a given year. A number closer to 1 indicates higher level of openness thus more globalization, whereas as the figure gets closer to 0, it indicates that the economy is getting more closed and less globalized. The analysis covers the period of 1994-2014 in a span of 20 years.

The analyses employed in this paper uses a dual treatment. In the first set of models (i.e., Model 1 and Model 2) the explanatory power of each variable are tested by replacing one from another. By this way, the paper attempts to measure to what extent one variable is able to explain the other and vice versa. Through this reasoning the true direction of the relationship between globalization and FDI volume is attempted to be solved. Accordingly Model 1 is formed as follows:

$$1) \quad FDI_{it} = \alpha + \beta(OT_{it}) + \varepsilon_i \quad (\text{Model 1})$$

$$2) \quad OT_{it} = \alpha + \beta(FDI_{it}) + \varepsilon_i \quad (\text{Model 2})$$

In the first set of models *FDI* (UNCTAD, 2015) variable represents FDI flow volume and *OT* (The World Bank, 2015b) variable represents openness to trade and thus the level of globalization for each country group in a given year.

In the second set of models, the interchangeability among the two variables is attempted to be measured. In this new set of models,  $Y_{it} - Y_{it-1}$  represents magnitude of GDP growth (The World Bank, 2015b) over time as a dependent variable, whereas  $Y_{it-1}$  represents lagged GDP value (The World Bank, 2015b) for each country group in any given year.

$$3) \quad Y_{it} - Y_{it-1} = \alpha + \theta(Y_{it-1}) + \beta(FDI_{it}) + \delta(AC_{it}) + \varepsilon_i \quad (\text{Model 3})$$

$$4) \quad Y_{it} - Y_{it-1} = \alpha + \theta(Y_{it-1}) + \beta(OT_{it}) + \delta(AC_{it}) + \varepsilon_i \quad (\text{Model 4})$$

According to the results of the analyses - summarized below in *Table 1* - in the first part of the dual treatment, Model 1 and Model 2 turned out to be significant for all country groups. Moreover in Model 1 globalization variable and in Model 2 FDI volume variable also turned out to be significant for all country groups. Through comparing the results among Model 1 and Model 2, it can be said that; for all country groups globalization explains FDIs more than FDIs explain globalization. This means that the direction of the relationship between FDIs and globalization is from globalization to FDIs, meaning as countries get more global, their FDI attractiveness and FDI participation increases more than FDIs serve to make countries more global.

When the second part of the dual treatment of the analyses is examined, both Model 3 and Model 4 appear to be significant for all country groups. Additionally, for low income and high income country groups FDI volume variable has no significant effect on economic growth

(Model 3), whereas globalization variable turned out to be significant for all country groups (Model 4). When the two models in this section is compared it can be said that globalization has more explanatory power than that of FDIs on the economic growth in each country group. On overall, it can be said that the interchangeability power between the two variables is too low.

*Table 1: Summary of the Results*

Country Groups	Model 1		Model 2		Model 3		Model 4	
	Coef.	Signif.	Coef.	Signif.	Coef.	Signif.	Coef.	Signif.
H-I	7.44E+12	√	8.01E-14	√	1.147451	X	5.36E+13	√
U-M-I	1.05E+12	√	1.76E-13	√	10.47911	√	5.85E+12	√
L-M-I	7.8E+11	√	8.55E-13	√	4.648943	√	2.05E+12	√
L-I	1.22E+11	√	3.74E-12	√	1.171283	X	1.91E+11	√

Sources: The World Bank, 2015b; UNCTAD, 2015.

#### 4. CONCLUSION

This paper attempted to clarify the chicken and egg situation between FDIs and globalization. The results of the analyses employed in this paper clearly shows that there is a mutual relationship between FDI movements and globalization. On one side, getting more global means countries can participate more in FDI movements and as countries participated more in FDI movements, they get more global on the other side. However according to the results of this paper, former case is turned out to be the direction of this mutual relationship. The existence of this mutual relationship can be confirmed from the increased parallel FDI movements and globalization in the last 25 years (The World Bank, 2015b, UNCTAD, 2015). The reason behind that fact should be attributed to the FDIs' role in the expansion of globalization as much as the role played by globalization in increased FDI movements.

In increasing FDI and globalization movements, the role played by international cooperation organizations is also very important. Through their channels as a first step to globalization regional integration can be achieved. In this process, FDIs could accelerate regional integration and regional integration can serve as a stimulus for FDI movements at the same time.

Moreover, in order to increase both FDI movements and to accelerate globalization process countries should invest in improving their structural and institutional qualities. In order to participate more in FDI movements countries should establish an environment of trust for investors and at the same time by improving their infrastructure in this matter countries can get more closer to the western system. In turn, both actions would result an increase in FDI movements and an accelerated globalization process.

In short, the paper attempts to emphasize the importance of FDI movements in the globalizing world and the existence of the mutual link between them. However, it should not be forgotten that; while countries are deciding to take part in the globalization process or participating in FDI movements, they should absolutely take the potential positive and negative effects of both globalization and FDIs into consideration and should become more open to both only when the positive aspects outweigh the negative ones.

#### LITERATURE

1. Aitken, B.J. and Harrison., A.E. (1999). *Do Domestic Firms Benefit from Direct Foreign Investment? Evidence from Venezuela*. American Economic Review, Vol. 89, No. 3, pp. 605-618.
2. Association of Southeast Asian Nations (ASEAN). (1998). *Framework Agreement on the ASEAN Investment Area*. Retrieved 23.10.2012 from <http://www.aseansec.org/6466.htm>.



3. Azzimonti, M. and Sarte, P-D. G. (2007). *Barriers to Foreign Direct Investment Under Political Instability*, Economic Quarterly, Vol. 93, No. 3, pp. 287-315.
4. Brunner, A. D. (2003). *The Long-run Effects of Trade on Income and Income Growth*. Working Paper 03/37, International Monetary Fund, Washington DC.
5. Büthe, T. and Milner, H.V. (2008). *The Politics of Foreign Direct Investment into Developing Countries: Increasing FDI through International Trade Agreements?* American Journal of Political Science, Vol. 52, No. 4, pp. 741-762.
6. Büthe, T. and Milner, H.V. (2011). *Institutional Diversity in Trade Agreements and Foreign Direct Investment: Credibility, Commitment, and Economic Flows in the Developing World, 1971-2007*. American Political Science Association Annual Meeting, Seattle, 2011.
7. Carkovic, M. and Levine, R. (2002). Does Foreign Direct Investment Accelerate Economic Growth? Moran, Graham and Blomström (eds.), *Does Foreign Direct Investment Promote Development?* Institute for International Economics, Center for Global Development, Automated Graphic System Inc., Washington DC, pp. 195-220.
8. Dollar, D. and Kraay, A. (2004). *Trade, Growth and Poverty*. The Economic Journal, Vol. 114, No. 493, pp. 22-49.
9. Dreher, A. (2006). *Does Globalization Affect Growth? Evidence from a New Index of Globalization*. Applied Economics, Vol. 38, No. 10, pp. 1091-1110.
10. Dunning, J. H. (1995). *The Role of Foreign Direct Investment in a Globalizing Economy*. BNL Quarterly Review, No. 193, pp. 125-144.
11. Freeman, K. A. and Jackson, K. C. (2012). *In Pursuit of Happiness, Bhutan Opens to Globalization and Business*. International Journal of Business and Social Research, Vol. 2 No. 5, pp. 132- 143.
12. Görgülü, M. E. (2015). Foreign Direct Investment: In Pursuit of Happiness. Twenty-second Annual Conference on International Business and Contemporary Issues in Business 2015, Rapid City.
13. Golub, S. S. (2003). *Measures of Restrictions on Inward Foreign Direct Investment for OECD Countries*. OECD Economics Department Working Papers, No. 357.
14. Golub, S. S. (2009). *Openness to Foreign Direct Investment in Services: An International Comparative Analysis*. The World Economy, Vol. 32, No. 8, pp. 1245-1268.
15. Gwartney, J., Lawson, R. and Block, W. (1996). *Economic Freedom of the World: 1975-1995*. Fraser Institute, Vancouver.
16. Harrison, A. (1996). *Openness and Growth: A Time Series, Cross-Country Analysis for Developing Countries*. Journal of Development Economics, Vol. 48, pp. 419-447.
17. Krugman, P. (2007). Trade and Inequality. Retrieved 19.01.2015 from <http://www.voxeu.org/article/trade-and-inequality-revisited>.
18. Levine, R. and Renelt, D. (1992). *A Sensitivity Analysis of Cross-Country Growth Regressions*. The American Economic Review, Vol. 82, No. 4, pp. 942-963.
19. Long, G. (2005). China's Policies on FDI: Review and Evaluation. Moran, Graham and Blomström (eds.), *Does Foreign Direct Investment Promote Development?*, Institute for International Economics. Center for Global Development, Automated Graphic System Inc., Washington DC, pp. 315-336.
20. Lopez-Claros, A., Porter, M., Sala-i-Martin, X. and Schwab, K. (2006). *Global Competitiveness Report 2006-2007*. Palgrave McMillan, London.
21. Lyroutdi, K., Papanastasiou, J. and Vamvakidis, A. (2004). *Foreign Direct Investment and Economic Growth in Transition Economies*. South Eastern Europe Journal of Economics, Vol. 2, No. 1, pp. 97-100.
22. Lupu, I. (2013). *A Foray into the Tangle of Globalization Measurement*. Financial Studies, 2/2013, pp8-20.

23. Marchick, D. M. and Slaughter, M. J. (2008). *Global FDI Policy: Correcting a Protectionist Drift*. Council on Foreign Relations Council Special Report, No. 34.
24. Organisation for Economic Co-operation and Development (OECD). (2003). *OECD Codes of Liberalisation of Capital Movements and Current Invisible Operations: User's Guide 2003*, OECD, Paris.
25. Organisation for Economic Co-operation and Development (OECD). (1976). *OECD Declaration and Decisions on International Investment and Multinational Enterprises*, OECD, Paris.
26. Organisation for Economic Co-operation and Development (OECD). (2006). *OECD Roundtables on Freedom of Investment*. Retrieved 11.12.2013 from [http://www.oecd.org/document/25/0,3746,en\\_2649\\_34887\\_42105753\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/25/0,3746,en_2649_34887_42105753_1_1_1_1,00.html).
27. Polachek, S. W., Seiglie, C. and Xiang, J. (2012). Globalization and International Conflict: Can FDI Increase Cooperation Among Nations? Garfinkel and Skaperdas (eds.), *The Oxford Handbook of the Economics of Peace and Conflict*. Oxford Handbooks Online, Scholarly Research Reviews.
28. Randolph, J. (2001). *G-index: Globalisation Measured*. World Markets Research Center, London.
29. Sachs, J.D. and Warner, A. M. (1995). *Economic Reform and the Process of Global Integration*. Brookings Papers on Economic Activity, No. 1, pp. 1-118.
30. Samimi, P., Lim, G.C. and Buang, A.A. (2012). *A Critical Review on Synthetic Globalization Indexes*. International Journal of Fundamental Psychology & Social Sciences, Vol. 2, No. 1, pp. 28-31.
31. Sarkar, P. (2007). *Does Foreign Direct Investment Promote Growth? Panel Data and Time Series Evidence from Less Developed Countries 1970-2002*. MPRA Paper, No. 5176.
32. Seyidoğlu, H. (2009). *Uluslararası İktisat Teori Politika ve Uygulama*, Güzem Can Yayınları, İstanbul, No. 24.
33. Sharma, S. (2012). *Role of Foreign Direct Investment in Inclusive Globalization*. International Journal of Social Sciences & Interdisciplinary Research, Vol. 1, No. 3, pp. 71-77.
34. Stiglitz, J. E. (2004). *Globalization and Growth in Emerging Markets*. Journal of Policy Modeling, No. 26, pp. 465-484.
35. Sun, X. (2002). *Foreign Direct Investment and Economic Development What Do the States Need To Do*. Capacity Development Workshops and Global Forum on Reinventing Government on Globalization, Role of the State and Enabling Environment, Morocco.
36. The World Bank. (1988). *Multilateral Investment Guarantee Agency (MIGA)*. Retrieved 17.12.2012 from [http://www.miga.org/about/index\\_sv.cfm?stid=1736](http://www.miga.org/about/index_sv.cfm?stid=1736).
37. The World Bank. (2010). *International Centre for Settlement of Investment Disputes (ICSID)*. Retrieved 17. 12. 2012 from [http://icsid.worldbank.org/ICSID/FrontServlet?requestType=CasesRH&actionVal=ShowHome&pageName=AboutICSID\\_Home](http://icsid.worldbank.org/ICSID/FrontServlet?requestType=CasesRH&actionVal=ShowHome&pageName=AboutICSID_Home).
38. The World Bank. (2015a). *2015 Country and Lending Groups*. Retrieved 12.11.2015 from <http://data.worldbank.org/about/country-and-lending-groups>.
39. The World Bank. (2015b). *2015 World Development Indicators*. Retrieved 12.11.2015 from <http://wdi.worldbank.org/tables>.
40. United Nations Conference on Trade and Development (UNCTAD). (2001). *World Investment Report 2001: Promoting Linkages*, United Nations, New York, pp. 276.
41. United Nations Conference on Trade and Development (UNCTAD). (2010). *World Investment Report 2010: Investing in a Low-Carbon Economy*. United Nations, New York, pp. 172.

42. United Nations Conference on Trade and Development (UNCTAD). (2015). *UNCTADstat 2015*. Retrieved 15.11.2015 from <http://unctadstat.unctad.org/EN/>.
43. Vujakovic, P. (2010). *How to Measure Globalization? A New Globalization Index (NGI)*. Atlantic Economic Journal, Vol. 38, No.2, pp. 237-271.
44. Walter, A. (1999). Globalization and Policy Convergence: The Case of Direct Investment Rules. Higgott, Richard, Underhill, Geoffrey and Bieler, Andreas (eds.), *Non-State Actors and Authority in the Global System*. Routledge/Warwick Studies in Globalisation. Routledge, London, pp. 51-73.
45. World Trade Organization (WTO). (1994a). *Agreement on Trade-Related Investment Measures, WTO Uruguay Round*. Retrieved 16.06.2014 from [http://www.wto.org/english/docs\\_e/legal\\_e/legal\\_e.htm](http://www.wto.org/english/docs_e/legal_e/legal_e.htm).
46. World Trade Organization (WTO). (1994b). *General Agreement on Trade in Services, WTO Uruguay Round*. Retrieved 16.06.2014 from [http://www.wto.org/english/docs\\_e/legal\\_e/legal\\_e.htm](http://www.wto.org/english/docs_e/legal_e/legal_e.htm).
47. World Trade Organization (WTO). (1996). *Working Group on the Relationship Between Trade and Investment*. Retrieved 18.12.2014 from [http://www.wto.org/english/tratop\\_e/invest\\_e/invest\\_e.htm](http://www.wto.org/english/tratop_e/invest_e/invest_e.htm).
48. World Trade Organization (WTO). (2001). *Doha Development Agenda: Negotiations, Implementation and Development, WTO Doha Development Agenda*. Retrieved 09.06.2014 from [http://www.wto.org/english/tratop\\_e/dda\\_e/dda\\_e.htm](http://www.wto.org/english/tratop_e/dda_e/dda_e.htm).
49. WTO (World Trade Organization). (2015). *China and the WTO*. Retrieved 09.11.2015 from [https://www.wto.org/english/thewto\\_e/countries\\_e/china\\_e.htm](https://www.wto.org/english/thewto_e/countries_e/china_e.htm).
50. United Nations (UN). (2007). *Indicators of Sustainable Development: Guidelines and Methodologies, Full Set of Methodology Sheets*. 3rd Ed., United Nations, New York, pp. 344.

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<sup>1</sup> 1 - i.e. Afghanistan, Benin, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Dem. Rep. Congo, Eritrea, Ethiopia, The Gambia, Guinea, Guinea-Bissau, Haiti, Dem. Rep. Korea, Liberia, Madagascar, Malawi, Mali, Mozambique, Nepal, Niger, Rwanda, Sierra Leone, Somalia, South Sudan, Tanzania, Togo, Uganda, Zimbabwe (The World Bank, 2015a).

<sup>1</sup> 2 - i.e. Armenia, Bangladesh, Bhutan, Bolivia, Cabo Verde, Cameroon, Rep. Congo, Cote d'Ivoire, Djibouti, Arab Rep. Egypt, El Salvador, Georgia, Ghana, Guatemala, Guyana, Honduras, India, Indonesia, Kenya, Kiribati, Kosovo, Kyrgyz Republic, Lao PDR, Lesotho, Mauritania, Fed. Sts. Micronesia, Moldova, Morocco, Myanmar, Nicaragua, Nigeria, Pakistan, Papua New Guinea, Philippines, Samoa, Sao Tome and Principe, Senegal, Solomon Islands, Sri Lanka, Sudan, Swaziland, Syrian Arab Rep., Tajikistan, Timor-Leste, Ukraine, Uzbekistan, Vanuatu, Vietnam, West Bank and Gaza, Yemen Rep., Zambia (The World Bank, 2015a).

<sup>1</sup> 3 - i.e. Albania, Algeria, American Samoa, Angola, Azerbaijan, Belarus, Belize, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, China, Colombia, Costa Rica, Cuba, Dominica, Dominican Rep., Ecuador, Fiji, Gabon, Grenada, Islamic Rep. Iran, Iraq, Jamaica, Jordan, Kazakhstan, Lebanon, FYR Macedonia, Malaysia, Maldives, Marshall Islands, Mauritius, Mexico, Mongolia, Montenegro, Namibia, Palau, Panama, Paraguay, Peru, Romania, Serbia, South Africa, St. Lucia, St. Vincent and Grenadines, Suriname, Thailand, Tonga, Tunisia, Turkey, Turkmenistan, Tuvalu (The World Bank, 2015a).

<sup>1</sup> 4 - i.e. Andorra, Antigua and Barbuda, Argentina, Aruba, Australia, Austria, The Bahamas, Bahrain, Barbados, Belgium, Bermuda, Brunei Darussalam, Canada, Cayman Islands, Channel Islands, Chile, Croatia, Curacao, Cyprus, Czech Republic, Denmark, Estonia, Equatorial Guinea, Faeroe Islands, Finland, France, French Polynesia, Germany, Greece, Greenland, Guam, Hong Kong SAR (China), Hungary, Iceland, Ireland, Isle of Man, Israel, Italy, Japan, Rep. Korea, Kuwait, Latvia, Liechtenstein, Lithuania, Luxembourg, Macao SAR (China), Malta, Monaco, Netherlands, New Caledonia, New Zealand, Northern Mariana Islands, Norway, Oman, Poland, Portugal, Puerto Rico, Qatar, Russian Federation, San Marino, Saudi Arabia, Seychelles, Singapore, Sint Maarten (Dutch part), Slovak Rep., Slovenia, Spain, St. Kitts and Nevis, St. Martin (French part), Sweden, Switzerland, Taiwan (China), Trinidad and Tobago, Turks and Caicos Islands, United Arab Emirates, United Kingdom, United States, Uruguay, RB Venezuela, Virgin Islands (U.S.) (The World Bank, 2015a).

## AIRLINE CREW PAIRING PROBLEM: A LITERATURE REVIEW

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### **ABSTRACT**

*The airline crew scheduling problem is one of the most important problems by all airline companies that can affect cost structure, time constraints etc. substantially. In terms of cost structure, crew costs come second in scale after fuel costs. The airline crew scheduling problem, therefore, is the key for developing solutions in order to decrease operational costs (total crew cost). Unlike the fuel expenses, operational costs can be controlled. The airline crew scheduling (ACS) is generally divided into crew pairing problem and crew rostering (or crew assignment) problem. Crew pairing and crew rostering are considered separate but related problems. The aim of the airline crew pairing problem (CPP) is to come up with a set of minimal cost crew pairings by covering all flight legs. In the rostering problem, these pairings are assigned to specified crew members. In this paper, we review the literature on crew scheduling problems for airlines. Our aim is to present a comprehensive review, emphasizing recent studies and solution methodologies.*

**Keywords:** *Airline crew scheduling, Crew pairing, Crew rostering, Set partitioning*

### **1. INTRODUCTION**

The fundamental airline problems can be classified as operational and planning problems. Every problem category has its own unique characteristics and objectives. There are certain decisions to be taken in airline industry before realizing a flight leg. For example, deciding the origin and destination points, fleet type and crew are decisions that must be given during planning phase. Since planning process is highly complex and takes a longer time to solve, in the literature, this problem is divided into three steps: (1) Flight scheduling, (2) Aircraft scheduling, (3) Crew scheduling. Aircraft and crew scheduling problems are also divided into two sub-categories. Aircraft scheduling is solved in 2 steps, the first one being fleet assignment and the second one being aircraft routing. On the other hand, crew scheduling is also solved in two steps and these steps are crew pairing and crew rostering.

Operational steps can be listed as the following: (1) Revenue management, (2) gate assignment, (3) irregular operations. The planning and operational processes can be summarized in Fig. 1. Therefore, the output of one phase is the input of another phase. In this paper, crew pairing problem of crew scheduling problem is examined.

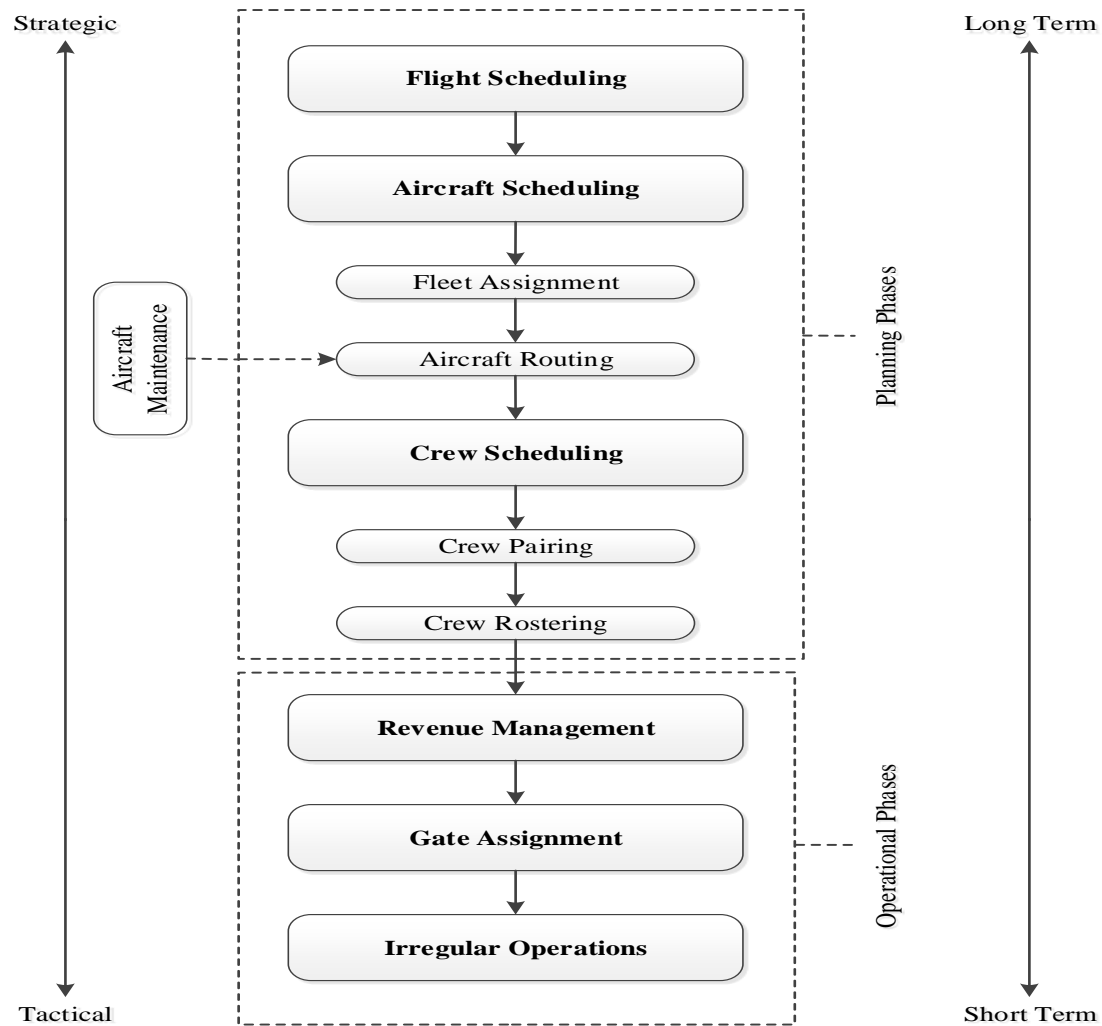


Figure 1: The hierarchy of airline planning (Bazargan, 2004)

Crew scheduling problem is one of the most comprehensive problems in airline planning. Since crew costs are one of the most controllable cost items for an airline company, efficient assignment of crew to flight legs is quite significant from the airline planning perspective. Crew costs being the second most greatest cost item after fuel costs and fuel costs being not open to cost reduction, crew scheduling problem is such an important problem that airline companies cannot trivialize. In 1991, American Airlines has spent 1.3 million dollars for crew expenditures (Anbil vd., 1992; Gopalakrishnan ve Jonhson, 2005). In the table below, crew costs from different airline companies and the revenues that can be realized by minor improvements are shown.

Table 1: Crew cost for US major airlines (Bazargan, 2010)

Carrier	Number of flight crew	Flight crew expenses (000)	Crew expense/ operating expense (%)
Alaska	1,455	180,845,000	5.57%
AirTran	1,632	157,383,851	6.00%
American	11,166	1,152,808,000	4.48%
Continental	4,867	623,767,000	4.05%
Delta	12,299	802,811,000	3.84%
Southwest	5,915	965,329,000	9.13%
United	6,478	757,020,000	3.44%
US Airways	5,275	482,044,882	3.39%

Since airline operations (airplane and crew), are the most expensive items of airline industry, scheduling of these two items are crucial for airline companies. Since efficient use of these two resources can result in huge amounts of savings, both airline companies and researchers have developed various optimization techniques to acquire optimum crew schedules. In this paper, crew scheduling problems are examined in detail, with a view to provide cost savings for airline companies. Crew scheduling problem, in general, is a NP-hard optimization problem that must be solved under many constraints. There are several methodologies to simplify the solution of NP-hard problems and these methods are improved for each problem . There is also a detailed literature review and a simple case is presented. To solve crew pairing problem, genetic algorithm among evolutionary algorithms.

## 2. LITERATURE REVIEW

The crew scheduling problem is a important problem for airline companies because it influences the cost of the airlines. The problem is generally solved in two stages: (1) crew pairing problem and (2) crew rostering problem. The aim is to minimize crew costs while satisfying the many constraints imposed by airline company rules and government (Hoffman and Padberg, 1993).

In the literature, many optimization approaches have been proposed to solve crew scheduling problem For example, linear programing, linear programing relaxation, mixed linear and integer programming (branch-and-bound, branch-and-cut, and branch-and-price etc.), zero-one integer linear programming, non-linear integer programing, multi-objective integer programming, Trip Pairing for Airline Crew Scheduling (TPACS), volume algorithm, SPRINT, artificial intelligence methods (logical programming, pure constraint logic programming etc.) as well heuristic approaches (genetic algorithm, tabu search, simulated annealing, colony optimization, iterative approach, scatter search etc.). Heuristic and meta-heuristic methods have been widely studied (Maenhout and Vanhoucke, 2010; Cacchiani and Salazar-Gonzalez, 2013; Cappanera and Gallo, 2004; Kerati et al., 2002). The crew scheduling problem appears in not only airline companies but also other transportation. The methods used for crew scheduling is shown in Table 2.

Table 2: The methods used for crew scheduling.

Method	Types	The number of authors
Set partitioning		36
Set covering		18
Mixed or integer programming		24
LP relaxtion		13
Linear programing (LP)	Exact methods	5
Branch-and-price		6
Branch-and-bound		4
Branch-and-cut		2
Shortest path problem		13
Tree search algorithm		3
Column generation		40
Benders decomposition		6
Dantzig-Wolfe decomposition	Other methods	1
Carmen systems		5
Nonlinear integer programing	Nonlinear	2
Stochastic programing	Stochastic	4
Genetic algorithm	Population-based metaheuristics	11
Ant colony optimization		2
Tabu search algorithm	Single solution-based metaheuristics	2
Simulated annealing		1
Local search algorithm		1
Other approaches	-	34

### 3. AIRLINE CREW PAIRING PROBLEM

Crew pairing (CP) problem deals with finding the cluster of crew pairings with a minimum cost that can meet the crew need of each flight leg in the flight schedule. In this phase, the individual needs of crew are not taken into account (Medard ve Sawhney, 2007). Crew pairing problem is composed of consecutive flight series beginning with one home base and ending with another home base for each fleet type. This problem is generally solved in two steps. In the first step, all legal pairings satisfying the legal constraints are generated. In the second phase, among the crew pairings generated, the cluster of crew pairings covering all the flight legs in the flight schedule at least once with a minimum cost is selected (Gustafsson, 1999).

A crew pairing (CP) is a sequence of flight legs that starts and ends at a crew base and generally lasts three or four days. A crew member usually works four or five pairings per month. This condition is sometimes change according to legal rules. The most important part of efficient crew utilization is consist of pairings that cover all flight legs and minimize total cost. This problem is referred to in the literature as crew pairing problems (Anbil et al., 1992).

The crew pairings are constrained by rule sets defined by laws in Federal Aviation Administration (FAA) safety regulations as well as company collective agreement rules, and crew unions.

Under these constraints the airline company obviously wants to find the least cost and optimal possible pairings so that each flight should be covered by one crew and by one aircraft (Ekenback, 2010). The following definitions are used in addressing the crew pairing problem (Bazargan, 2010):

**Duty:** A working day of a crew may consist of a few flight legs. The period of a duty is determined by FAA regulations as well as by individual airline company rules or crew unions. For example, one of these rules: airline pilot or cabin crews cannot total fly more than 8 hours and total duty time 14 hours in a 24-hour period.

**Sit connection:** A connection during duty is called a sit connection times. Generally, airlines consider minimum and maximum sit connection times, generally between 30 minutes and 3 hours (sometimes 4 hours).

**Rest:** A connection between two duty period is called to as rest, layover or overnight connection.

Fig. 1 shows a pairing that begins and ends at the IST Airport, a local airlines crew base in Turkey. This figure represents an illustration of a pairing that consists of two duties and two-day crew pairing, showing duty periods, sit time within duty periods, brief, debrief, overnight rests, and sign-in and sign-out times. According to this figure, a crew pairing is a sequence of duty period separated by overnight rest. Generally rest expenses between duty periods: the crew is staying overnight, away from their home base, and thus, the airline has to pay for their per diems, taxi fee, hotel, food, and so on. The first duty period contains four flight legs while the second duty period contains three flight legs and. Both pairing and duty period must observe with FAA, the crew unions, airline company rules and government. The decision rules is provides a legal pairing.

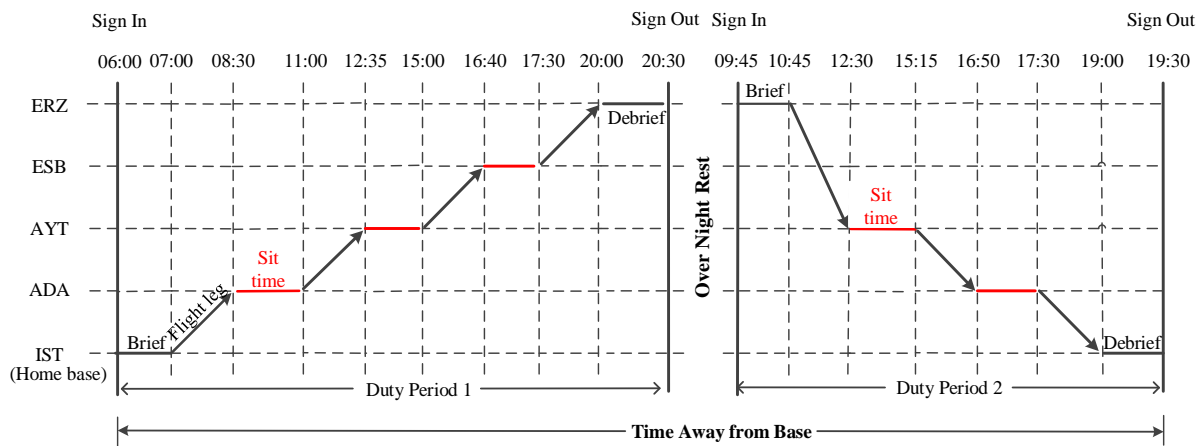


Figure 2: Example of crew pairing with IST airport as crew base



Fig 2. presents an example of a flight schedule for a four-day planning horizon consist of 41 flights.

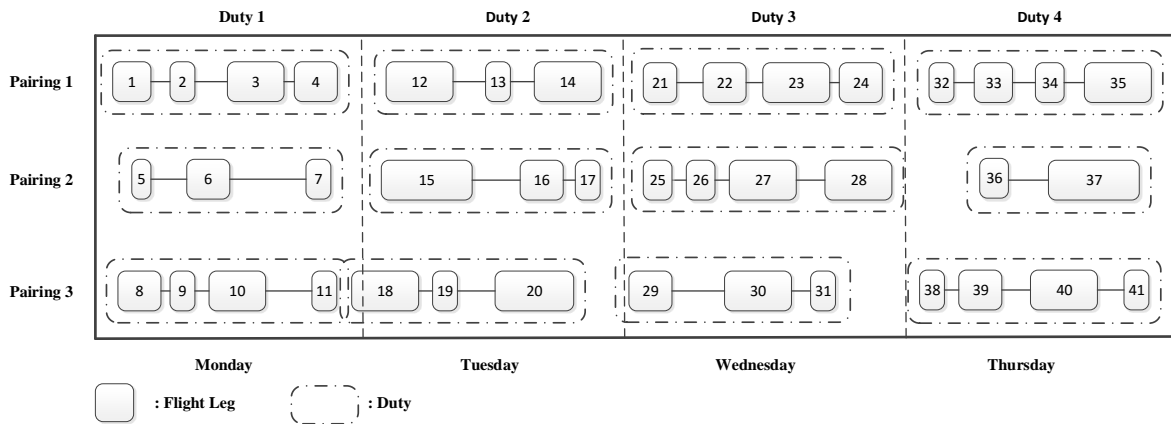


Figure 3. Example of a flight schedule

Figure 4 illustrates in detail “pairing 1” from Figure 3. Origin and destination cities are determined for every flight leg (e.g., Dep. and Arr. for leg 1), on the other hand departure and arrival times in minutes are also determined for each flight leg (e.g., 250 and 350 minutes for leg 1). The start and finish time points for monday operations are 0 and 1440 minutes, respectively. Therefore, a departure time of 250 minutes means that a flight departs at 04:10 a.m. on monday, while a flight leaving at the same time on Tuesday would have a departure time of 1620 minutes. Figure 2 indicates that debriefing and briefing time periods must be at least 30 and 60 minutes respectively, and also that all flights are domestic flights and the rest time must be at least 12 hours

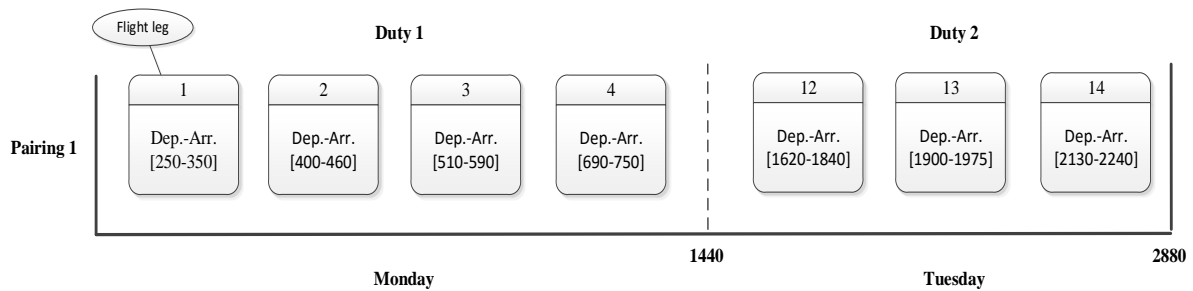


Figure 4: Example for pairing 3 in Figure 3

#### 4. AIRLINE CREW ROSTERING PROBLEM

After the crew pairing stage, it is not addressed to individual crew members because it is part of the next stage: crew rostering (Gutierrez et al., 2013).

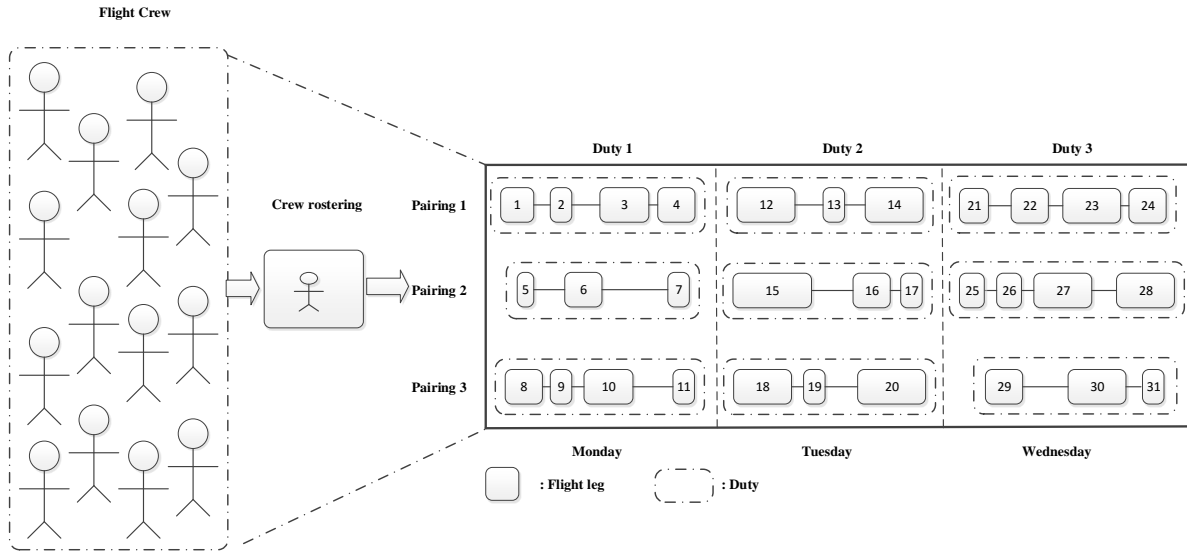


Figure 5: Crew rostering procedure using crews

## 5. OPTIMIZATION

Selection of the set of best crew pairing is modelled as a problem of set covering or set partitioning in the literature solved with genetic algorithm. The purpose of set partitioning is to find the most cost-effective pairings in which each flight is covered by only one crew pairing. A flight can be covered more than once in set covering model. The advantage of this method is that deadheads can be taken into account in the problem. Furthermore, solution of the problem in set partitioning model can be impossible while a feasible solution can be found in set covering model. Where  $F$  represents the flight set and  $P$  represents legal pairings created by these flights, the set covering problem for the crew pairing problems can be defined as follows;

Set covering:

$$\text{Min}(z) = \sum_{j=1}^P c(j) * x(j) \quad (1)$$

Subject to;

$$\sum_{j=1}^P a(i, j) * x(j) \geq 1 \quad \forall i \in F \quad (2)$$

$$x(j) \in \{0, 1\} \quad \forall j \in P$$

$$x(j) = \begin{cases} 1 & \text{if pairing } j \text{ is selected,} \\ 0 & \text{otherwise,} \end{cases}$$

$$a(i, j) = \begin{cases} 1 & \text{if flight leg } i \text{ is covered by pairing } j, \\ 0 & \text{otherwise,} \end{cases}$$

Eq. (1) shows the objective function in which the total cost is calculated. Eq. (2), on the other hand, indicates the constraint that guarantees all flights (rows) are covered at least once. If this equation equals to (=1), it becomes a set partitioning model.

## 6. CONCLUSION

In this paper, we focus on the airline crew scheduling problem (CSP). We first present a basic definition on the crew scheduling model. This study does not clearly include information on potential disruptions. Airline companies frequently have to cope with disruptions, such as air carrier delays, weather delays, late arrivals of aircrafts or diversion of aircrafts. Stochastic models take influence of random factors into account. In this paper we survey different approaches which have been studied so far, present a solution methodology and discuss future directions for the airline CSP.

At the crew scheduling problem, the prudential studies are mainly concerning to tiredness of the team. The main two factors that lead to tiredness of the team: sleep loss and irregular sleep. Although there are so many Federal Aviation Administration rules, there is no a specific rule concerning to minimizing sleep loss and irregular loss habits. You know that irregular sleep affects "circadian rhythms" of the sleep and this lead to tiredness (Gander et al., 1998; Rosekind et al., 1994).

## LITERATURE

1. Anbil, R., Tanga, R. and Johnson, E. L. (1992). A global approach to crew-pairing optimization. *IBM Systems Journal*, 31(1), 71-78.
2. Bazargan, M. (2004). *Airline operations and scheduling*. 1<sup>st</sup> Edition. Ashgate Publishing, Ltd.
3. Bazargan, M. (2010). *Airline operations and scheduling*. 2<sup>nd</sup> Edition. Ashgate Publishing, Ltd..
4. Cacchiani, V. and Salazar-González, J. J. (2013). A heuristic approach for an integrated fleet-assignment, aircraft-routing and crew-pairing problem. *Electronic Notes in Discrete Mathematics*, 41, 391-398.
5. Cappanera, P. and Gallo, G. (2004). A multicommodity flow approach to the crew rostering problem. *Operations Research*, 52(4), 583-596.
6. Ekenback, A. (2002). *A column generation heuristic for a combinatorial optimization problem*. Master's Thesis in Computer Science at the School of Engineering Physics, Royal Institute of Technology
7. Gander, P.H., M.R. Rosekind and K.B. Gregory. (1998). "Flight Crew Fatigue." *Aviation, Space and Environmental Medicine*, 69, (9 Suppl.), B49-B60.
8. Gopalakrishnan, B. and Johnson, E. L. (2005). Airline crew scheduling: state-of-the-art. *Annals of Operations Research*, 140(1), 305-337.
9. Gustafsson, T. (1999). *A heuristic approach to column generation for airline crew scheduling*. Chalmers Tekniska Högskola/Göteborgs Universitet. Department of Mathematics.
10. Puentes Gutierrez, J. M. (2013). Algorithm creation and optimization for the crew pairing problem.
11. Hoffman, K. L. and Padberg, M. (1993). Solving airline crew scheduling problems by branch-and-cut. *Management Science*, 39(6), 657-682.
12. Kerati, S., Moudani, W. E., De Coligny, M. and Mora-Camino, F. (2002). A heuristic genetic algorithm approach for the airline crew scheduling problem. *In Workshop on Multiple Objective Metaheuristics*, Paris.

13. Maenhout, B. and Vanhoucke, M. (2010). A hybrid scatter search heuristic for personalized crew rostering in the airline industry. *European Journal of Operational Research*, 206(1), 155-167.
14. Medard, C. P. and Sawhney, N. (2007). Airline crew scheduling from planning to operations. *European Journal of Operational Research*, 183(3), 1013-1027.
15. Rosekind, M.R., P.H. Gander, R.M. Smith, K.J. Weldon and K.L. McNally. (1994). "Fatigue in Aviation." *Air Line Pilot*, 63(10), 22-25.

## A STUDY ON THE INFLUENCING FACTORS ON THE R&D PERFORMANCE - IN CASE OF THE SMBS IN KOREA

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### ABSTRACT

*To overcome economic crisis, Korean government underlined the roles of R&D and SMB. This paper empirically examines the relationship between financial information as influencing factors and National R&D Performance of SMBs for instance patent, paper, commercialization royalty. Total 7,736 of SMBs which participated in 31,722 R&D Projects from 2002 to 2010 are observed in this study. OLS(Ordinary Least Squares) regression is applied for the estimation using Heckerman Correction for assessing selection bias. The main results are as follows. Firstly, total research fund, growth rate of total asset, ratio of owner's equity and number of employers have positive effects on patent registration and application while firm age of SMBs has a negative effect. In addition, total research fund, operating profit ratio, growth rate of total asset, number of employers and age of SMBs have positive effects on commercialization but asset and ratio of owner's equity have negative effects. Lastly, it is found that academic paper is affected positively by total research fund, ratio of owner's equity, asset and number of employers. The findings of this study have practical implications for the relationship between financial status and performance of SMBs.*

**Keywords:** *Financial Information, Performances, Research and Development, SMBs(Small Medium-sized Businesses)*

### 1. INTRODUCTION

In recent years, Korea has been experiencing the low economic growth after economic crisis in 2008. In order to overcome the economic situation, the government has put a great emphasis on the importance of the Creative Economy. In terms of S&T policy, creative economy is a policy which creates National Growth Engines, market and employment by managing the economy based on S&T Policy. SMBs are an important factor to create innovation and employment which leads to economic development. OECD(2014) also suggested that the role of SMB and Government funded Institutes are very critical factors in Korea. In a great consideration of these trends, Korean government increased National R&D investment including SMB's R&D. R&D Investment for SMBs have been steadily increased from 360 Billion Korean won in 2002 to 616 Billion won in 2012. Due to the economic crisis, Korea like other countries have run out of the budget. The authorities started concerning about the efficiency of National R&D programs and also about the fact that some SMBs have relatively less quantitative performances for instance SCI Paper, Patent, royalties. This study focuses on the relationship between the cost of R&D at project level, financial information of the SMB and quantitative performance measures such as patents, commercialization, SCI Papers. To empirically analyze, (1) we obtained R&D Project data of SMBs' from KISTEP. (2) We then purchased the financial information from credit evaluation organization in Korea and (3) subsequently integrated project data and financial information based on Corporate Registration Number of SMBs.

As a final step, (4) we analyzed the relationship between R&D performance and R&D budget, financial information. This study differs from previous studies since the effectiveness only focusing on R&D of SMB over 9 years was analyzed.

## **2. BACKGROUND ON SMALL AND MEDIUM-SIZED BUSINESSES(SMBS)**

### **2.1. The needs of supporting**

Until the early 1980s in Korea, large companies comparing with SMBs had a rapid growth due to the Economic Development Plan. The external factors from environment did not significantly affect SMB's growth. It can be assumed that Korea was meager in natural sources and government focused on large-scale support. It was capable of realizing economic growth by expanding exports.

Due to a rise in income levels, the desire of consumers for goods and services changed in the direction of advanced, personalized and diversified products with high added value. The importance of SMBs has been emerged to effectively respond those consumers.

The purpose of supporting SMBs involves in 'Competitiveness enhancement of SMBs and 'Social Stability'. In the view of 'Competitiveness enhancement', the new value of national economy is realised through innovation in SMBs. In 'social stability's view, small business is able to join the market economy freely and competitive region to maintain and develop the community.

### **2.2. The importance of SMBs**

Small and Medium-sized Businesses(SMBs) have played a crucial role in Korean economy like in other countries. In particular, Start-Ups including SMBs have played an important role in commercialization of new technologies as well as in job creation. The government planned to expand investment ratio of National R&D to 18.0% by 2016 for SMBs. In the year of 2013, SMBs in Korea account for 99.9%(3.35 Korean million won) of the total companies. Also they employed 87.7%(13.0635 Korean million won) of the workers in Korea. As it is already well aware, SMBs have played an important role in employment. The importance of SMBs continues to increase steadily in the national economy.

### **2.3. SMBs Participated projects in national R&D programs**

To support SMBs' R&D activity, the government mainly has funded through national R&D programs. The total budget of Korean R&D programs from 2002 to 2010 amounted to 83.3 trillion (KRW). Accounting for 11% of the total R&D budget was invested on SMBs. From 2002 to 2010, SMBs participated 57,220 projects in the government R&D program in Korea.

### **2.4. R&D performance measures**

The measurement of R&D performance are classified as quantitative, semi-quantitative, and qualitative (Werner and Souder, 1997; Kerssens-van Drongelen et al., 2000). Quantitative measures generate numbers that closely represent specific areas of R&D input, activity, output; examples including funding size, the number of papers, and commercialization. In general qualitative measures are essentially those based on personal or subjective judgments; they often encompass larger and relatively important dimensions, like the marketplace potential (Brown and Gobeli, 1992).

Korean government has managed performance measure on national R&D Programs since 2005. As a government affiliated research institute under the MSIP(Ministry of Science, and ICT and Future Planning), KISTEP has been surveying and analyzing R&D activities, performances on national R&D programs in Korea. Quantative performance of R&D programs likes the number of SCI paper, the number of registered(or applied) domestic(or oversea) patent, royalties, the number of commercializations, the number of human resources have been managed. However

only the number of SCI paper, the number of registered(or applied) domestic patent, royalties, the number of commercializations, the number of HRM(Human Resources Managing) have been collected. Due to the problem of difficulty in verifying detailed information, only the number of SCI paper, the number of registered(or applied) domestic(or oversea) patent and royalties are verufied. This study thus utilizes the number of SCI papers, the number of registered (or applied) patents, royalties, the number of commercializations as the dependent variable.

### 3. Research data and procedure

#### 3.1. Research data

##### 3.1.1. R&D project data of SMBs

The authorities have managed quantative performance of national R&D programs since 2005 MSIP-KISTEP(2014). and have published a report. They have not published the RCN(Registered Corporate Number) due to the Privacy Policy. Instead, this study used R&D project data obtained from the basic data of In-Depth Evaluation. It includes RCN(registerd corporate number) of SMBs which participated in government R&D programs. Table 1 and 2 show the profile of sample used in this study.

*Table 1: The Government funding of R&D projects of SMB Participated (Korean million won)*

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Budget (A)	612,593	651,420	757,634	828,457	925,042	1,014,814	1,178,665	1,500,186	1,635,350	9,104,160
Sample(B)	194,029	227,537	319,276	353,820	483,638	639,288	837,203	1,191,451	1,569,511	5,815,753
Ratio (%, =B/A)	31.67	34.93	42.14	42.71	52.28	63.00	71.03	79.42	95.97	63.88

Total : the budget of R&D projects participated SMB

*Table 2: The No. of R&D projects of SMB Participated*

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Total (A)	5,334	5,357	6,670	5,606	6,235	6,413	7,449	7,110	7,046	57,220
Sample(B)	1,487	1,673	2,488	2,152	3,129	3,809	5,208	5,453	6,383	31,782
Ratio(% , =B/A)	27.88	31.23	37.3	38.39	50.18	59.39	69.92	76.69	90.59	55.54

Total : the number of R&D projects participated SMB

##### 3.1.2. Financial Information of participated SMBs

As it is previously shown in <table 2>, the number of R&D projects is 31,782. This sample however includes outliers including missing values. Then we set the outliers to missing values.

The outliers is as follows;

- 6 Projects that the total R&D budget are more than 1,000,000,000(Korea Won)
- 4 Companies with R&D invest(Asset + expense account in the Financial Report) > 100,000,000,000(Korea Won)
- 22 Companies that have the total asset more than 10,000,000,000,000(Korea Won)
- 3,030 companies with return on Net Sales < -100%
- 1,778 companies with net sales growth rate less than -500% or more than 500%
- 714 companie that growth rate of total assets less than -500% or more than 500%
- 1,954 companies with debt ratio more than 1,000%
- 231 companies with current ratio less than 0% or more than 1,000%
- 33 companies that have the number of commercializations more than 10

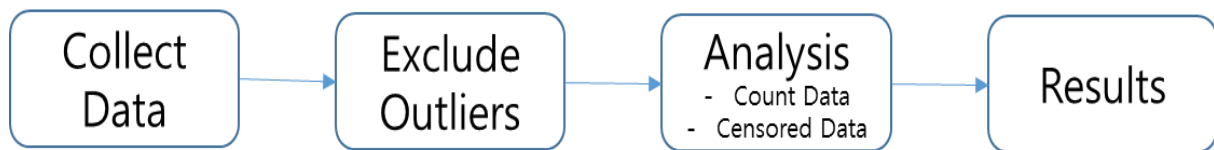
After excluding the outliers, final number of projetcs are 31,722 and <table 3> shows the projects group by R&D stage.

*Table 3: R&D projects in sample*

R&D Stage	Number in Sample	Percentage in Sample
Basic research	588	1.85
Applied research	2,304	7.26
Development research	27,080	85.37
Etc.	1,750	5.52
Total	31,722	100.00

### 3.2. Procedure

The procedure consists of 2 steps: In step 1, using NBD(Negative Binominal Distrinution) performance analysis is executed with the dependent variables like the number of registered(or Applied) Patents, the number of Commercializations, the Number of SCI papers. In step 2. using Probit and Heckman Selection Method, performance analysis is conducted with the dependent variable such as royalties. The entire framework for the current study is presented in Fig. 1.



*Fig. 1: Framework*

## 4. Statistical Analysis

### 4.1. Descriptive Statistics

The variables have the following characteristics: 1) the sum of domestic and oversea registered (or applying) patents per 1 project is 0.5148 of average and most of them are domestic patents. 2) The number of commercialization is 0.6098 of average, and the average level of royalties is about 11.3 mill. (Korean won). Besides the number of SCI papers appeared to be low. Average of total budget is 230 million (Korean won), per capita is 12.17 million (Korean won).



Annual Net Sales Growth Rate is 34.14% and average firm age is 101 months based on the foundation date. In addition, the average number of employees is 70.2 people which may be considered on the extent in the early stage of growth.

*Table 4. Descriptive Statistics for performance and financial variables*

Variables	Number in Sample	Avg.	S.D.	Min	MAX
Domestic Registered Patents(A)	31722	0.1858	0.8353	0	46
Oversea Registered Patents(B)	31722	0.0087	0.1521	0	9
Registered Patents(C=A+B)	31722	0.1945	0.8637	0	46
Domestic Applying Patents(D)	31722	0.2847	1.1353	0	41
Overseas Applying Patents(E)	31722	0.0355	0.4947	0	40
Applying Patents(F=C+D)	31722	0.3202	1.3529	0	81
Patents(=C+F)	31722	0.5148	1.8526	0	86
Commercializations	31689	0.6098	1.0793	0	10
Royalties(Korean million won)	31722	11.31	39.92	0	2080
Papers	31722	0.0469	0.4114	0	24
Private funding (Korean million won)	31722	48.4	104.3	0	3227
Government funding(Korean million won)	31722	181.9	256.3	0	8040
Total funding(Korean million won)	31722	230.3	321.7	0	8706
private fund per capita(Korean million won)	29871	2.43	8.77	0	648
Government funding per capita(Korean million won)	29871	9.74	32.45	0	1,987
Total funding per capita(Korean million won)	29871	12.17	38.10	0	2,222
Return on Net Sales	25,499	1.01	18.82	100	80.96
Net Sales Growth Rate	24,786	34.14	71.36	100	497.2
growth rate of total assets	25,521	34.41	57.94	-93.86	494.59
Debt Ratio	25,821	174.8	153.2	0	1,000
Stockholders Equity To total Assets	26,409	44.8	20.7	0	100
Current Ratio	26886	289.7	529.6	.29	9933.3

## 4.2. Analysis result

### 4.2.1. Count Data Regression

Having much of R&D projects' performance has 0 values, they show a distribution biased to the left. As it is shown, the annual average value of domestic and foreign patents, the maximum value. Specifically, the performance values do not have the negative value. Also royalties have not negative (-) value and have censored data. And this sample has a NBM (Negative Binomial Model) distribution for Count Data Regression (heckman, 1976; Cameron, A., and P. Travedi, 1998).

Then this study used Count Data Regression for analysis and the results show as follows in <Table 5>:

- 1) Based on NBM (Negative Binomial Model), the performances (The number of domestic (or oversea) of registered (or applied) patents, the number of SCI Papers) are increasing as the ln(R&D funding) increases. In case of commercialization, it shows a positive (+) effect on the only the government R & D funding.
- 2) The significance level between the number of domestic registered (or applied) patents and then number of workers is high as the worker's number is high. The significance is also high as the firm age is young.
- 3) Growth Rate of Assets and Growth rate of Stockholders Equity have a significantly positive effect on the performance like the number of registered (or applied) patents. Current Ratio and Debt Ratio are not significantly effective.
4. In case of Growth Rate of Sales, it only have a positive effect on the number of applied patents.
5. In some cases, Return on Net Sales has a negative significant effect on the number of Patents.

*Table 5. Regression Analysis Result*

	No. of Registered Patents	No. of Applied Patents	No. of Commercialization	No. of SCI Papers
Ln(total funding)	.4140*** (.0278)	.5882*** (.0241)	.0903*** (.0135)	.9555*** (.0672)
Return on Net Sales	-.0023 (.0014)	-.0030** (.0012)	.0023*** (.0007)	-.0023 (.0029)
Net Sales Growth Rate	.0005 (.0003)	.0008** (.0003)	-.00007 (.0001)	-.0006 (.0009)
growth rate of total assets	.0011** (.0005)	.0008* (.0004)	.0009*** (.0002)	.0009 (.0012)
Debt Ratio	.0002 (.0003)	-.00009 (.0002)	-.0002 (.0001)	.0002 (.0006)
Stockholders Equity To total Assets	.0059** (.0024)	.0041* (.0021)	-.0026** (.0012)	.0114** (.0052)
Current Ratio	2.16e-06 (.00005)	-.0001 (.00004)	4.71e-06 (.00002)	-.00005 (.0001)
Ln(Total Assets)	-.0026 (.0303)	.1095*** (.0272)	-.2062*** (.0155)	.1708*** (.0675)
Ln(workers)	.1324*** (.0328)	.1132*** (.0285)	.0550*** (.0168)	.1513** (.0685)
Ln(Firm Age)	-.1127*** (.0392)	-.1281*** (.0351)	.1041*** (.0194)	-.1142 (.0842)

#### 4.2.2. OLS and Heckman-Correction estimation

Regarding royalties, an analysis should include the size of royalties as well as the existence of royalties. This study analyzes the determinant factors of royalties through Probit Model. Subsequently this study analyzes the performance of companies with royalties. Considering the possibility of "Selection Bias", this study used "Heckman Correction"(Cameron and Trivedi, 2005). From the result of Heckman correction estimation, the coefficient of Mills is not significant. With this result this study then applied the OLS to estimation.

Table 6 shows the determinant factors of probabilities of Royalties. The result shows that the more government funds or the longer firm age is, the probability of occurrence for royalties increase. As it can be seen, closed SMBs have low probability of occurrence for royalties. Moreover, there is no significant effects on the performance by firm age nor the size.

Table 6. Estimation

	determinant factors analysis using Probit	Estimation	
		OLS	Heckman Correction
Ln(total funding)	.1717*** (.0101)	.9757*** (.0118)	1.0751*** (.0678)
Return on Net Sales	.0007 (.0005)	-.0002 (.0004)	.0003 (.0006)
Net Sales Growth Rate	-.0003* (.0001)	9.29e-06 (.0001)	-.0001 (.0001)
growth rate of total assets	.0004** (.0001)	-.0002* (.0001)	-.00005 (.0002)
Debt Ratio	.00006 (.0001)	.00005 (.00008)	.00009 (.0001)
Stockholders Equity To total Assets	-.0018** (.0009)	.0017** (.0007)	.0006 (.0011)
Current Ratio	-.00001 (.0000)	-2.09e-06 (.00001)	-
Ln(Total Assets)	-.1344*** (.0113)	.0454*** (.0091)	-.0327 (.0534)
Ln(workers)	-.0140 (.0122)	.0192** (.0095)	.0115 (.0128)
Ln(Firm Age)	.0797*** (.0144)	-.0185 (.0115)	.0283 (.0343)

#### 4. CONSLUSION

This study conducted performance analysis on SMB's participated R&D projects over 9 years(2002 to 2010) focusing on R&D programs evaluated In-Depth Evaluation. Several findings were derived from the study. The findings are as follows: Firstly, 46.8% of projects belongs to industries such as IT like electricity, medical-precision, Audio-visual and

Communication Equipment. 64.8 % of projects were performed by SMBs with less than 50 full-time workers. Average annual Net Sales Growth Rate is 34.1% and average firm age is 101 months. The average number of workers is 70.2 and they are growing compared with Start-Ups. Secondly, the proportion of development research is high by 85.4%. Also if it is sorted by technology field, the proportion of IT, ET and BT are high. Thirdly, government funding has a positive effect on the performance for example the number of domestic (or oversea) registered(or applying) patent and royalties. SMB's financial condition or property, and characteristics show varied effects depending on the type of performance.

The findings from the study could possibly be utilized by R&D policy makers or by companies conducting R&D funded by the government. Nonetheless, this study has some limitations. The sample for In-Depth Evaluation, measuring quantitative performance like patent, paper, commercialization and most of the data had several missing values in financial report. Findings derived from this paper are as follows: This article examines government R&D projects from 2002 to 2010 in Korea by analyzing the effect of project related variables and firm related variables on project performances. It can be suggested that the focus of this study is somewhat different from other studies as it is concentrated at the project level over 9 years of SMBs.

## LITERATURE

1. Cameron, A., and P. Trivedi(1998), Regression Analysis of Count Data, New York: Cambridge University Press.
2. Cameron, A. C and P. K. Trivedi(2005), Microeconometrics : Methods and Applications, Cambridge Univ. Press.
3. Heckman, J. J.(1976), "The Common Structure of Statistical Models of Truncation, Sample Selection and Limited Dependent Variables and a Simple Estimator for Such Models," Annals of Economic and Social Measurement, Vol.5, pp. 475-492.
4. MSIP·KISTEP(2014), The 2013 Survey Analysis Report of National R&D Program in Korea, Seoul

## WORK MIGRATION IN EUROPE

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### ABSTRACT

*The theme of work migration in Europe spiralled of the control. The labour mobility is low in EU region and despite of the positive changes in EU legislation in the labour mobility. Most of the EU countries implemented the law issues which make the work mobility much more easier as it was in the past. EU states try to make the public employment service reform and foster better and speedier recognition of qualifications. The work migration is also the point which helps to achieve the EU2020 goals of smart and inclusive growth.*

**Keywords:** work migration, labour migration, EU region, labour force, legislative

### 1. INTRODUCTION

It is the long history of Europeans work migration to another country in search of a better job or higher income has been a possibility for many European workers. The first time point when start free movement of EU workers within the the „European Common Market“ first became possible in 1968 and was the first of the four economic freedoms of the EU market to be implemented. The four economic freedoms mean free movement of goods, services and capital and were progressive improved in single European Market in 1993. It can be written that free work migration were applied different , in limited periods of time at different stages of the European Union's enlargements. The European Union's enlargements played strategic role in work migration because there were different time process when the countries apply the EU legislation regarding the work migration.

### 2. PRESENT SITUATION IN WORK MIGRATION IN EUROPE

The assumption for work migration start with good conditions for migration of citizens in Europe. This can be seen on chart 1 where are the result of migration in Europe. This results showed that the mobility among EU15 countries increased rapidly starting from 2003, and peaked in 2008 about 25% above the levels of the early 1990s

Chart 1: Time profile of intra-EU15 mobility

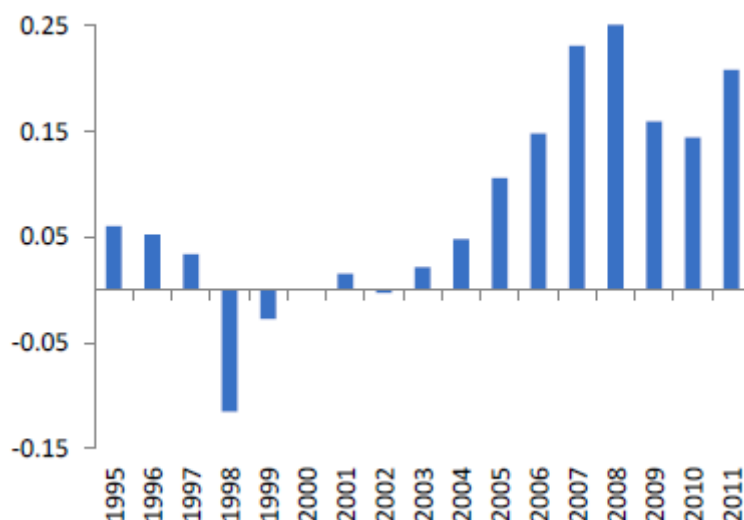
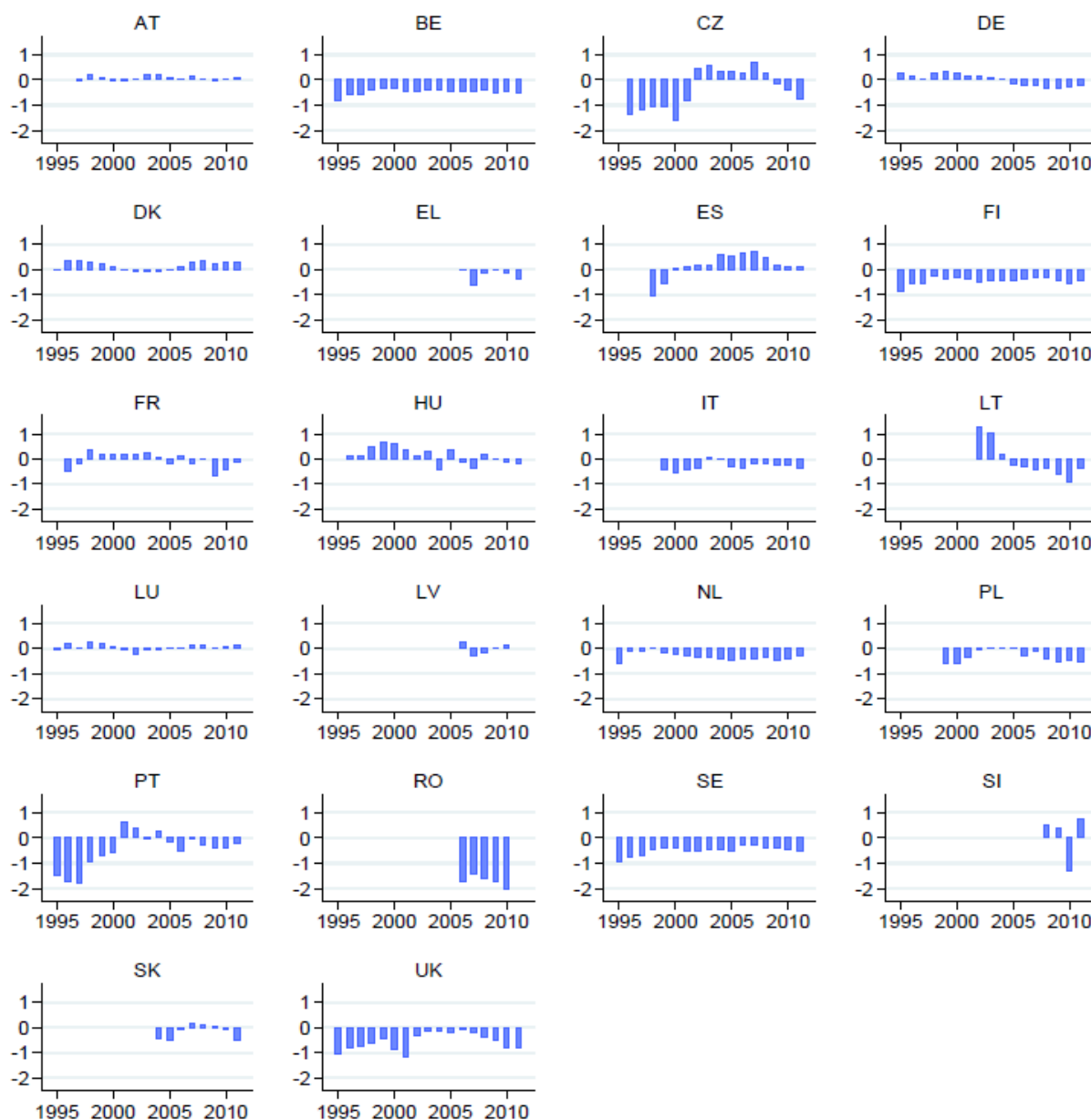


Chart 2: Unexplained mobility flows: weighted average by destination country (EU-28 countries in the sample)



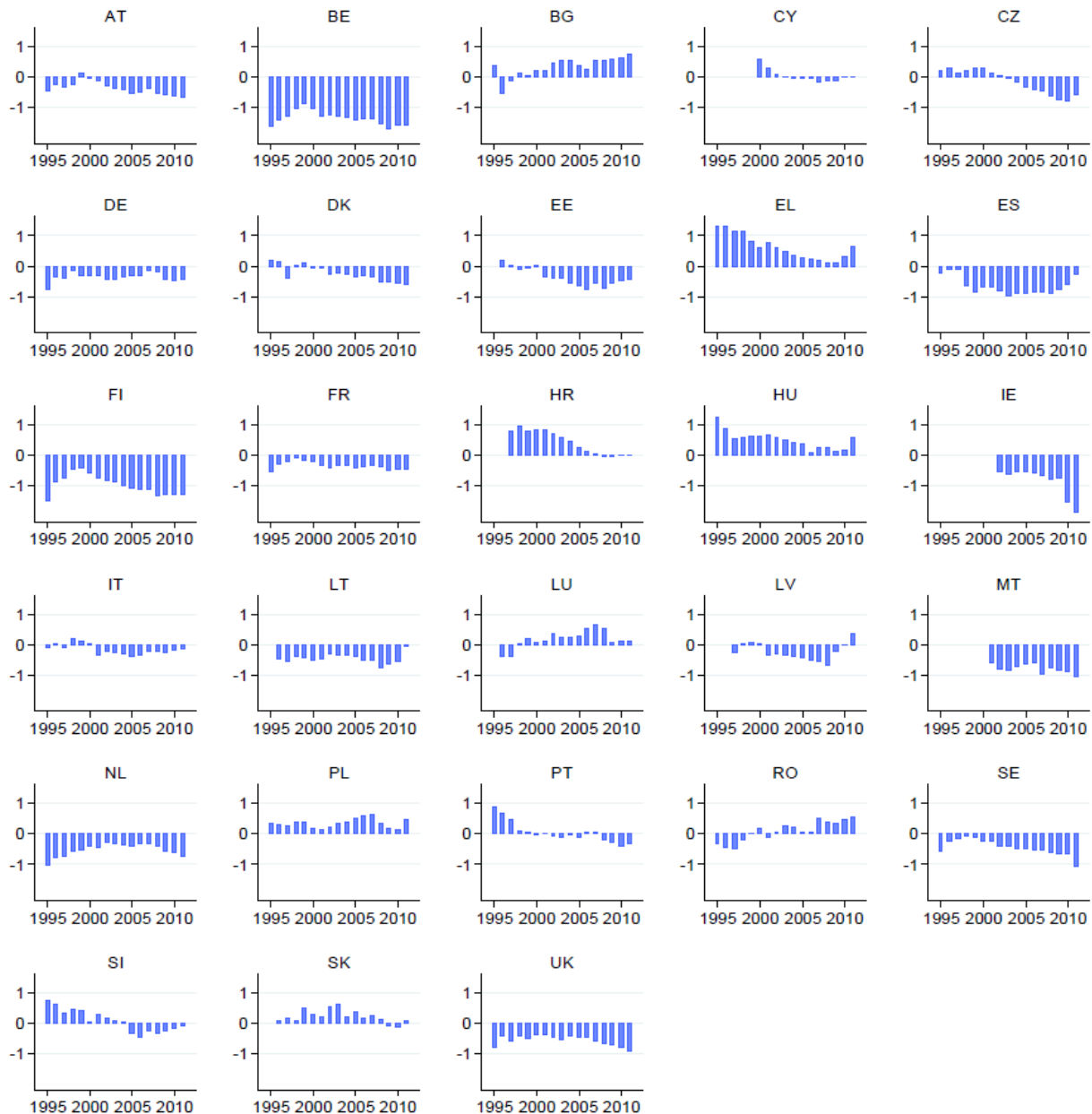
Note: Weights are time-invariant; they take into account the average migration flow and the number of observations for a given pair of origin and destination countries. The graph includes EU member states for which there is information in the database. Estonia and Ireland have been excluded for a low number of observations.

See the chart 2. There was a different development of work flow in EU countries.

Movements in the unexplained component of mobility inflows are largest in the Czech Republic, Lithuania, Portugal and Spain. In Spain, the unexplained component moves together with the cycle, suggesting that migration to this country was more pro-cyclical than in other countries. In the other three countries, the unexplained component appears to be largely pro-cyclical as well, but there appear to be idiosyncratic factors. Migration flows to the Czech Republic and Portugal were generally lower than predicted at the beginning of the sample period. Migration flows to Lithuania were higher than predicted in the first years observed in the early 2000s. Also, there is some increase in 2010-2011 in the unexplained component of migration inflows into countries of the euro area core, i.e., Austria, France, Germany,

Luxembourg and the Netherlands, while this is less clear in Belgium and Finland. (Labour Market and Wage Developments in Europe, 2015).

*Chart 3: Unexplained mobility flows: weighted average by origin country (EU-28)*



*Note: Weights are time-invariant; they take into account the average migration flow and the number of observations for a given pair of origin and destination countries.*

Chart 3 shows that there are more countries with marked movements in the unexplained component of outward mobility than inward mobility.

The chart 1, chart 2 and chart 3 showed the present situation on the main trends of labour mobility across EU countries.

### 3. ANALYSIS OF WORK MIGRATION IN EUROPE

In the migration theory it is well known that in the simplest framework, the decision of individual  $i$  ( $i = 1 \dots n$ ) in source country  $h$  to migrate to destination country  $f$  can be expressed as:

$$d_i = w_{fi} - w_{hi} - z_i - c > 0$$

This expression of migration is the citation by Hatton, T. J. and J. G. Williamson (2003).

$w_{fi}$  – earnings of the individual in destination ( $f$  for foreign) countries

$w_{hi}$  – earnings of the individual in destination ( $h$  for home) countries

$z_i$  – the individual's compensating differential in favour of  $h$

$c$  – direct cost of migration

This comparison can be viewed in terms of utility if, for example, utility is logarithmic and the variables are expressed as natural logs. Clearly, individual  $i$  is more likely to migrate the higher is the destination wage and the lower are the home wage, the compensating differential, and the fixed migration cost. If the first three terms are interpreted as present values then the likelihood of migration will decline with the age of individual  $i$  as the remaining working life becomes shorter. Thus, for a given incentive, migration will be higher the more the source population is skewed towards the younger working ages. (Hatton, T. J. and J. G. Williamson (2003), What fundamentals drive world migration? Discussion Paper No. 2003/23, United Nations University/World Institute for Development Economics Research, March.)

According to the studies there are different fundamentals of migration reasons. There is well known the income gap between EU countries. In fact this is one of the main point of work migration worldwide. The EU countries also have different economic development raised living standards. The difference between the living standard of EU countries can be also reason for work migration. In the formula above can be seen that the main factors which have the impact to individual decision for migration are earnings, difference between compensation in home and destination country of worker and the cost of migration.

### 4. CONCLUSION

There is a tendency for progressive flow of work migration in Europe. The one reason is that EU states nowadays implement more faster the law issues from EU legislation to national legislation. This improves the better conditions for work migration in EU region. It is much more difficult to set up or define reasons of present work migration level in Europe. Just researches in area of work migration can bring more clear view to reasons of work migration in EU region. The past situation in work migration was influenced also with geopolitical upheavals in Central and Eastern Europe and after beginning of EU all national governments try to cooperate in free movement across each EU state. This free movement of workers in EU brings the assumption for increasing the work migration in Europe.

### LITERATURE

1. Altonji, J. and D; Card (1991), The Effects of Immigration on the Labor Market Outcomes of Less-Skilled Natives in John Abowd and Richard B. Freeman, editors., Immigration, Trade and Labor. Chicago: University of Chicago Press, 1991. Aydemir, A. and G. Borjas (2006), A Comparative Analysis of the Labour Market Impact of International Migration: Canada, Mexico and the United States, National Bureau of Economic research, working paper N) 12327, June



2. Borjas, G., (2001), Does immigration grease the wheels of the labor market? Brookings Papers on Economic Activity 1, 69-133.
3. Hatton, T. J. and J. G. Williamson (2003), What fundamentals drive world migration? Discussion Paper No. 2003/23, United Nations University/World Institute for Development Economics Research, March.
4. Münz, R. (2004), Migration, Labour markets and Migrants' integration in Europe: A Comparison, Hamburg Institute of International Economics, June.
5. Salt, J. et al. (1999). Assessment of possible Migration Pressure and its Labour Market Impact following EU Enlargement to Central and Eastern Europe: Part I. Research report
6. Diez Guardia N. and Pichelmann, K., (2006) , Labour Migration Patterns in Europe: Recent Trends, Future Challenges by Directorate-General for Economic and Financial Affairs
7. EU Commission, (2015) Labour Market and Wage Developments in Europe 2015, Catalog, N. : KE-BN-15-001-EN-N

## **COST CONTROL POLICY IN MAERSK LINE**

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### **ABSTRACT**

*Cost control is a key factor of the survival in most activities where many competitors are present, because the possibilities for product differentiation are very limited. Slow steaming improves the reliability in the maritime transport, considering that greater flexibility, especially on longer distances, is enabled. The new generation vessels, the so-called Triple-Es, are designed to maximally take advantage of the slow steaming. There were made significant changes concerning the architecture of the ships, where the engine is placed on the hull and specially adapted for the lesser speed. Considering the fact that maritime shipping represents the most significant transport activity on global scale, and that the most important part of the Maersk Group is Maersk Line, this will be the main subject of this paper. Finally, the aim of this paper is to analyse the cost savings in business dealings, with a special emphasis on the Slow Steaming and the technological innovations in shipping which contribute to the company's savings plan.*

**Keywords:** *bunker cost, cost control, slow steaming, triple E-ships*

### **1. INTRODUCTION**

Maersk is one of the world's leading shipping companies operating in 130 countries worldwide and employing around 110 thousand people, based in Copenhagen. The conglomerate's portfolio encompasses several industries in which the company is a minority or a majority shareholder. The most important industries Maersk is involved in are global transport and energy, but also retail and banking services. Considering the fact that maritime shipping represents the most significant transport activity on global scale, and that the most important part of the Maersk Group is Maersk Line, this will be the main subject of this paper.

Maersk Line is the world's leading container shipping company, continually investing in the innovations development and cost savings in certain segments of their activities. Bearing in mind that the pressure from competitors is constantly rising, this being one of the consequences of the world market globalization, the aim of this paper is to analyse the cost savings in business dealings, with a special emphasis on the Slow Steaming and the technological innovations in shipping which contribute to the company's savings plan.

### **2. COST CONTROL IN THE MAERSK GROUP**

#### **2.1. Cost control on all levels**

Cost control is a key factor of the survival in most activities where many competitors are present, because the possibilities for product differentiation are very limited. Before the very cost analysis, it is important to point out that the Maersk Group is not a monopolist, but a company operating in the competitive market. Even though the shipping companies are mostly large, not a single company can be considered a global monopolist. The market entry is relatively free, and after the weakening of the conferences, it has been additionally facilitated. The market power of a shipping company is possible in specific lines or markets, but the global

market power or a monopolistic position is difficult to achieve. The example of Maersk, as well as the MSC and some other shipping companies, show that, instead of being present in single markets, the companies have been trying to achieve a global presence. The alliances shipping companies occasionally enter are always under the global market competition agencies' supervision. Most recent example is the pressure made by the American Alliance Regulator on the Maersk and the MSC alliance (Paris, 2014).

The capacity limitations policies cannot raise the prices, so Maersk has been forced to continue the cost limitations policies. One has to prepare for a price war because there is a surplus of the shipping companies present in the market (Wienberg, 2013). The price wars are definitely a market competition trait (The Economist, 2012). The possibilities for a physical product differentiation, considering the transit period, geographic coverage, the sailing frequency and reliability, are limited. High price premiums are not sustainable, and stimulations for the investment in new and bigger ships can lead to overcapacity and fragmentation of industry, while high fixed costs lead to cost-competiveness (A. P. Møller - Mærsk A/S, 2014, p. 10).

The costs can be reduced on several levels. Maersk has found itself in the position of having to reduce the costs after the acquisition of Sea-Land in 1999 and the P&O NedLloyd in 2006. At that time, the container business was not profitable, so the activities needed to be stabilized after the expansion. The company's income increased by 600% from 1997 till 2007 (Jephson, Morgen, 2013, p. 328). Despite all difficulties, the company has demonstrated a great stability, managing to overcome the crisis fairly easily, despite the relatively unstable conditions. The entire A.P. Moller - Maersk Group conglomerate generated loss of \$1 billion in the year 2009, for the first time in its 104-year-long business tradition. The main cause was the loss of \$2.1 billion made by Maersk Line. The trade scope limitations, as a consequence of the crisis, resulted in the company's income deductions by more than \$8 billion, when comparing the years 2008 and 2009, i.e. the income dropped from 28,666 to 20,611 (Jephson, Morgen, 2013, p. 330). The liner shipping company survived mostly owing to the rest of the conglomerate. Nevertheless, the volatility of the shipping industry became evident the very next year, when Maersk Line recorded the profit of \$2,642 billion.

The most painful of all the measures a company can undertake to reduce the costs is to cut back employees, so in 2006, the number of workers was reduced by 1500 (Leach, 2008). After 2008, the employees' cutback by 3000 was announced and the structure of the global regions in which Maersk operates was reorganized, and the number of the organizational units was reduced from 14 to 11. There was a general rationalization of the middle management, which lead to the layoffs of 400 out of 2200 employees in the company's central offices (Weir, 2012). Excluding the number of seamen and the related services, which can be considered as fixed functions depending on the number of ships in the fleet, the number of employees was reduced from 25,768 in 2008 to 22,967 in 2009 (Jephson, Morgen, 2013, p. 330). After the consolidation the recovery followed, as well as the recruiting of employees (Maersk Line, 2013). The conclusion can be made that the company operated extremely rapidly and successfully. The cost of employees can certainly be reduced by cutting back the pays, but there is no data showing that Maersk conducted this kind of strategy.

Other significant cost segment a shipping company can influence by taking measures is the fuel cost, i.e. the bunker cost. The fuel costs can reach up to half of a vessel's total operational costs (Maloni, Paul, Gligor, 2013, p. 153). In the periods of high oil prices in the global markets, companies try to minimize the expenditure per container unit. One way is to achieve the economies of scale, i. e. to build larger vessels which can transport more containers. The other

solution is to optimize the sailing, i.e. to regulate the sailing speed, in order to deliver the goods relatively punctually, with the minimum fuel expenditure. The application of these strategies does not always lead to a success, which is evident in the example of the US Lines bankruptcy in 1986. In trying to address the fuel cost rising issue, Malcolm McLean ordered relatively larger and slower ships, the 12 so-called Jumbo Econships. It was expected that the fuel costs would be doubled in relation to the early 1980s. But the opposite happened, and the ships with these kinds of performances suddenly became uncompetitive. The speed of 18 knots they reached, as opposed to the normal speed of 22-24 knots, meant delays of several days, depending on the route length, in relation to the competitors. Every day, the ship generates costs because of the seamen wages, amortization and operating costs, and the opportunity costs which arise while the ship is not in operations. A faster ship can do more routes and in that way compensate for an eventual lower load-carrying capacity. The benefits of the technological solutions employed were not higher than the costs and the company went bankrupt. This bankruptcy was one of the largest in the American history (Margolick, 1991). Some ships were later on remodelled as to adapt to the market. Both strategies, the efficiency increase through acquiring larger ships and the fuel savings (slow steaming) are analyzed in more detail in the following two chapters.

## **2.2. Increase of the business efficiency**

Increase in efficiency as a ratio of the provided service and the costs level is seen from two angles: financial and physical. In the first one, the analysis focuses on the number of employees needed to achieve a certain profit, and in the second one, it focuses on the number of ships required in order to transport a specific amount of cargo measured in TEUs in one year. The company rapidly answered to the decrease in profit by laying off approximately 10% of the workforce. The work efficiency was probably rising due to the technological progress as well, but it has to be taken in mind that Maersk has always been aware of the fact that the information technologies are a potential source of competitive advantages. In the economic terminology, one can say that Maersk has always strived to provide for its employees well in terms of the capital. As well as any other company, Maersk has employed the work and the capital according to the market logic, but what has distinguished it from other competitors is surely the information technologies (Jephson, Morgen, 2013, p. 196).

As early as 1982, department for managing TELEX<sup>22</sup> logged 3000 incoming and 1500 outgoing messages per day (Jephson, Morgen, 2013, p. 105). A system resembling the today's e-mail services already existed in the early 1980s, when the concept of a computer was not yet generally known. In the year 1984, the system was among the most advanced in the industries. Information systems which followed, like MAGIC (Maersk Advanced Global Information Concept) from the end of the 1980s, continually ensured competitive advantages. By 2012, the company employed over 12,000 workers in India and other locations in Asia, 8,000 of them with the task of servicing Maersk Line (Jephson, Morgen, 2013, pp. 97-125).

With the investment in the technology and physical capital, MAERSK understood very early the importance of human capital in relation to the efficiency increase. A.P Moller and Maersk McKinney Moller preferred the learning approach at work in the first half of the 20<sup>th</sup> century. After the year 1950 they began with the corporation organization programmes, and in 1993 the Maersk International Shipping Education programme started, where they have worked in

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<sup>22</sup> TELEX is a system of communication in which messages are sent over long distances by using a telephone system and are printed by using a special machine.

collaboration with the business schools from Denmark and India in order to create high grade workers (Jephson, Morgen, 2013, pp. 164-166).

The fact that the shipping companies in each next generation order ever larger container carriers shows the existence of the economies of scale in the industry. Kremer (2013) points out that greater and bigger to a certain limit, which perhaps has not yet been reached in the container shipping, is better. The first container ship from 1956 was of the following dimensions: length - 137m, width - 17m and depth 9 m, and it could carry the cargo of 500 TEUs to 800 TEUs. On the other hand, the biggest container ships today, 400m in length, can carry up to 20,000 TEUs.

### 3. SLOW STEAMING IN SHIPPING INDUSTRY

The fuel cost is a significant factor in the total transport costs, and in the shipping terminology, it is known as the “bunker”. Today, most ships and vessels in the merchant fleet use fossil fuels, and the diesel motors prevail. The price of the fuel for ships depends on the raw oil price movement in the global markets, which in turn depends on various factors, from economic to political, so the price instability is a commonly accepted fact. Fuel savings can be accomplished by slower sailing. Other important aspect of the use of the fossil fuel for the drive is the emission of CO<sub>2</sub> in the atmosphere, which is why it is necessary to buy the emission rights. The shipping sector is a part of the ETS<sup>23</sup>, which is an additional motive for reduction of speed, considering that lower speed means lower CO<sub>2</sub> emissions. The shipping sector CO<sub>2</sub> emissions equal the entire emissions in Germany. Table 1 shows how the shipping sector emits 2.62% of CO<sub>2</sub> in the world (International Maritime Organisation, 2014).

After all, in the times of crisis, slower sailing means better use of the capacity surplus, because the job is conducted slower (Maloni, Paul, Gligor, 2013, p. 2-3).

Year	Global CO <sub>2</sub>	Total shipping	% of global	International shipping	% of global
2007	31.409	1.100	3,50%	885	2,82%
2008	32.204	1.135	3,52%	921	2,86%
2009	32.047	978	3,05%	855	2,67%
2010	33.612	915	2,72%	771	2,29%
2011	34.723	1.022	2,94%	850	2,45%
2012	35.640	938	2,63%	796	2,23%

Table 1. Shipping CO<sub>2</sub> emissions compared with global CO<sub>2</sub>, millions of tons (International Maritime Organisation, 2014)

In 2014 global fleet-wide average of grams of CO<sub>2</sub> emissions per TEU carried per kilometer traveled was 53.4. Maersk Line is performing better than Clean Cargo Working Group's (CCWG) average on almost all trades, and globally Maersk Line has more than a 10 percent advantage over the global CCWG industry average (Clean Cargo Working Group, 2015).

In 2007, Maersk Line introduced for the first time the so-called "Slow Steaming", whose characteristic is that cargo ships sail with a lesser engine load, which has eventually become a standard (Reinhardt, Casadesus-Masanell, Nellemann, 2012, p. 12). Slow steaming was developed as a part of the framework dealing with the simultaneous cost decrease on all levels and the increase of business efficiency, but with the emphasis on retaining the reliability and

<sup>23</sup> Emission trading system - is a cornerstone of the European Union's policy to combat climate change and its key tool for reducing industrial greenhouse gas emissions cost-effectively.

respecting the set delivery deadlines. At that time, the Maersk team of expert engineers closely monitored the fuel expenditure on specific routes, reaching to some conclusions on the fuel savings. The exemplary route from Europe to Singapore with the then largest ship "Emma Maersk" showed that the possible fuel saving was about 4000 tons of fuel.

In the period from 2007 till 2008 the era of "Slow Steaming" started. At that time, the shipping companies recorded a surplus in the transport cargo. The freights were extremely low, and the bunker costs high. One of the most important reasons why shipping companies opt for this strategy is the raise of the fuel prices. Besides, the lower emission of harmful gases in the atmosphere is important, as well as the absorption of the tonnage surplus in the cargo (Woo, Moon, 2014, pp. 177-178).

Full speed in practice means sailing at the speed of 24 knots, which implies the use of 85-90% of the engine capacity. There are different gradations of the "slow steaming" below this level, so the sail at the speed of 21 knots is considered "slow steaming", of 18 knots "extra slow steaming" and of 15 knots "super slow steaming". Already at the slow steaming, with the bunker prices of \$500 a ton, 5-7% is saved (Maloni, Paul, Gligor, 2013, p. 3). The bunker price movement at Maersk Line during the last 10 years was from 189.3 dollar per ton in 2004 to 661 dollar per ton in 2012. Prices instability is also depicted in the fact that in the year 1998 the cost was only 81 dollar per ton of fuel (Jephson, Morgen, 2013, pp. 131-132).

Slow steaming improves the reliability in the maritime transport, considering that greater flexibility, especially on longer distances, is enabled. The delays can occur due to many reasons, and as a rule, can be compensated with the increase of the speed. Working below full speed therefore means greater flexibility, which can be significant, due to the fact that in 2010 only 50-60% of the arrivals in the ports were on time. Although the logic is pretty clear, there are uncertainties as to whether slow steaming could improve the reliability (Maloni, Paul, Gligor, 2013, pp. 4-5).

The new generation vessels, the so-called Triple-Es, are designed to maximally take advantage of the slow steaming. There were made significant changes concerning the architecture of the ships, where the engine is placed on the hull and specially adapted for the lesser speed. Therefore the space beneath the deck is larger, which enables more cargo to be transported. The ships sail with the lesser motor load and at lesser speeds. Besides that, the engines are weaker than in the former "Emma Maersk". When compared, the emission of CO<sub>2</sub> is lesser by 30% than the average on the route from Asia to Afrika.

Nevertheless, besides all the positive characteristics, the slow steaming has to be primarily seen as the answer to the rise of global concern about the climate changes. Business logic, in the first place, requires larger and faster. Longer sailing means lesser utilization of the ships, which are extremely expensive and long-term investments. The prolongation of the transport deadline can mean lesser possibilities of long-term planning. Furthermore, the issues can occur when the goods are of a short shelf life, like perishable goods and products (short life cycle products), like seasonal clothes and electronics.

The shipping market has cyclic characteristics, so the question arises what sense the slow steaming sailing makes. Since the very slower way of sailing is in the first place the answer to the oil prices increase in the world markets, it is expected that, in the periods of recovery in the shipping markets, the sailing speeds will come back to normal, or ever become higher (Hong Liang, 2014). Although denying the benefits of the slow steaming, Maersk Line points out that,

despite the drop of oil prices in the world market, it will continue to use the strategy, therefore minimizing the effect of low and unstable freights.

#### 4. TRIPLE-E SHIPS

Innovations are an integral part of the modern-day business, and the innovations in shipping are at the same time directed towards the energy and economy efficiency, as well as the reliability. The investment in Triple-E ships, which the Daewoo Shipbuilding & Marine Engineering (DSME) is building for MAERSK, is seen as one of the most significant innovations in the shipping recently. Triple-E means economies of scope, energy efficiency and ecologically more acceptable vessel. As already mentioned in the chapter on container shipping within a conglomerate, Triple-E class is an improved and modified version of “Emma Maersk”, until recently the largest ship in the world. Unlike “Emma Maersk”, which has 22 rows along the entire width, triple-E ships have 23 rows, i.e. capacity for 1500 more containers. The carrying capacity of a triple-E ship is 18,000 TEUs. The dimensions of a Triple-E are 400m in length, 59m in width and 73 m in height. The draught is 14.5m and the carrying capacity 165,000 tons. The highest possible speed estimated for this type of a container ship is 23 knots. Triple-Es are driven by two slow running engines<sup>24</sup> powered by two large propellers, this combination being known as the “Twin Skeg”. The reason for using this combination has come from the Maersk Line study which showed that, in that way, the saving of energy is achieved by further 4% in relation to the design with one engine, i.e. one propeller.

Special optimization of the hull and the shape of the bow have enabled the achievement of the highest possible speed of 23 knots, compared to “Emma Maersk” whose speed maximum was 25 knots. This small difference in the speed maximum decreases the outgoing power of the engine by 19%, which enables lesser engine torque curve and much more economical (lesser) fuel expenditure. Bearing in mind better efficiency, the vessels will have lower emission of carbon dioxide. The emission of CO<sub>2</sub> per delivered container is lesser by 20% in relation to most efficient container ships now available. The optimized design ensures the sailing with the maximum load at the speeds prevailing in the industry.

For the decrease of the influence on the environment of the ships outside their life cycle, Maersk Line has set new standards concerning the way of their recycling. All the materials used for the building of Triple-E class will be documented and mapped at the ship as the “cradle-to-cradle passport”. This means that when a ship is sent to a ship breaking yard, this document will ensure that all materials can be reused, recycled or disposed off in the safest and most efficient way (Maersk Line).

Triple-E ships will enable Maersk to conduct cost-efficiency policy on all levels through the fuel savings, considering that the engines are specially adapted to operate under lesser load and for slower sailing, i.e. slow streaming, and the savings by the unit cost of the goods transport, better utilization of a ship’s space because of the architectural changes and the possibility of transporting more containers.

#### 5. CONCLUSION

Although cost control brings numerous advantages, it can be very risky, and should be seen as a means of answering to the recession and as a short-term solution. For a given measure to be successful, it should be conducted along with the increase of efficiency. The increase of efficiency is conducted by investing in the existing workforce and technological innovations.

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<sup>24</sup> Slow Running Engines - “Ultra-Long Stroke”

In the period of crisis one should think outside the box and adapt to the occurring situation as soon as possible. The most recent crisis, among other things, has caused the prices in the oil market to rampage.

As an answer to the same issue, Maersk Line has adapted its fleet to the slow steaming way of sailing. Besides, ships that can carry more cargo are being built. On the other hand, the sailing time is being prolonged. An important example of the innovations is Triple-E vessels which can carry more cargo with a significantly lesser unit cost. They sail under lesser load of the engine, therefore saving fuel. In this case, the innovation is created to ensure savings, which do not only encompass fuel, but the freight as well, which is very important for the clients. In this line of business, good relations with the clients are extremely important, and they are reflected through the reliability which is ensured by complying with their demands and strictly respecting the timetables. Additionally, with the innovations companies try to achieve a more favourable impact on the environment, which is achieved through lesser emissions of CO<sub>2</sub> in the atmosphere and with the reuse of materials after a ship is sent to a breaking yard.

## LITERATURE

1. Clean Cargo Working Group (2015). 2015 Progress Report. Retrieved 10.11.2015. from [http://www.bsr.org/reports/BSR\\_Clean\\_Cargo\\_Working\\_Group\\_Progress\\_Report\\_2015.pdf](http://www.bsr.org/reports/BSR_Clean_Cargo_Working_Group_Progress_Report_2015.pdf).
2. Hong Liang, L. (07.10.2014). The economics of slow steaming. Retrieved 05.11.2015. from <http://www.seatrade-maritime.com/news/americas/the-economics-of-slow-steaming.html>.
3. International Maritime Organisation (2014). Reduction of GHG emissions from ships. Third IMO GHG Study 2014 - Final Report. Retrieved 18.09.2015. from <http://www.iadc.org/wp-content/uploads/2014/02/MEPC-67-6-INF3-2014-Final-Report-complete.pdf>.
4. Jephson, C., Morgen, H. (2014). *Creating Global Opportunities: Maersk Line in Containerisation 1973-2013*, Cambridge University Press.
5. Kremer, W. (19.02.2013). How much bigger can container ships get? BBC World Service. Retrieved 12.10.2015. from <http://www.bbc.com/news/magazine-21432226>.
6. Leach, P. T. (27.01.2008). Streamlining the Leviathan. *The Journal of Commerce*. Retrieved 05.10.2015. from [http://www.joc.com/streamlining-leviathan\\_20080127.html](http://www.joc.com/streamlining-leviathan_20080127.html).
7. Maersk Line (26.09.2013). Maersk Line - Performing In Rough Seas. Retrieved 20.09.2015. from [http://files.shareholder.com/downloads/ABEA-3GG91Y/0x0x693342/68e1f253-b6f7-4c9b-b22a-f6d31c8625aa/Maersk\\_Line.pdf](http://files.shareholder.com/downloads/ABEA-3GG91Y/0x0x693342/68e1f253-b6f7-4c9b-b22a-f6d31c8625aa/Maersk_Line.pdf).
8. Maersk Line. Introducing the Triple E. Retrieved 24.10.2015. from <http://www.maerskline.com/en-us/shipping-services/dry-cargo/our-network/triple-e-card-cascading>.
9. Maloni, M., Paul, J. A., & Gligor, D. M. (2013). Slow steaming impacts on ocean carriers and shippers. *Maritime Economics & Logistics*, 15(2), pp. 151-171.
10. Margolick, D. (04.10.1991). At the Bar; How Three Missing Zeros Brought Red Faces and cost Millions of Dollars. New York Times. Retrieved 12.10.2015. from <http://www.nytimes.com/1991/10/04/news/bar-three-missing-zeros-brought-red-faces-cost-millions-dollars.html>.
11. P. Møller - Mærsk A/S (2014). Group Annual Report 2013. Retrieved 07.09.2015. from [http://files.shareholder.com/downloads/ABEA-3GG91Y/997532353x0x729321/A978848A-3C8C-40A8-BC5D-8D23FBCED038/Group\\_Annual\\_Report\\_2013.pdf](http://files.shareholder.com/downloads/ABEA-3GG91Y/997532353x0x729321/A978848A-3C8C-40A8-BC5D-8D23FBCED038/Group_Annual_Report_2013.pdf).
12. Paris, K. (09.11.2014). Maersk, MSC to Hold Talks With U.S. Watchdog Over Shipping Alliance: Partners to Address Concerns About Possible Delay in 2M Venture. *The Wall Street Journal*. Retrieved 05.10.2015. from <http://www.wsj.com/articles/maersk-msc-to-hold-talks-with-u-s-watchdog-over-shipping-alliance-1410428215>.



13. Reinhardt, F. L., Casadesus-Masanell, R., Nellemann, F. (2012). Maersk Line and the Future of Container Shipping. *Harvard Business School Case Study*.
14. Shipping. A fragile truce. (09.06.2012), *Economist*, Retrieved 27.09.2015. from <http://www.economist.com/node/21556632>.
15. Weir, M. (01.06.2012). Maersk Line lays off hundreds at HQ. Retrieved 08.10.2015. from <http://www.lloydsloadinglist.com/freight-directory/sea/Maersk-Line-lays-off-hundreds-at-HQ/6799.htm#.VkJLB7erSUI>.
16. Wienberg, C. (23.05.2013). Maersk to Extend Cost Cuts as European Imports Founder. Bloomberg Business. Retrieved 06.10.2015. from <http://www.bloomberg.com/news/articles/2013-05-22/maersk-to-extend-cost-cuts-as-european-imports-founder-freight>.
17. Woo, J. K., Moon, D. S. H. (2014). The effects of slow steaming on the environmental performance in liner shipping. *Maritime Policy & Management*, 41(2), pp. 176-191.

## LOYALTY PROGRAMMES IN CROATIAN RETAIL COMPANIES

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### ABSTRACT

*Customer relationship management (CRM) is based on integrated market management, sales and special services for the clients, as organizational key functions of a company. On the whole it represents the strategic orientation of a company to put the customer in the spotlight. Customers are the most valuable asset, inasmuch as the success on the market and the future cash flow directly depend on their loyalty. The loyalty of the customer is reflected in a repeating purchase, forgiving possible errors and „recruiting“ of new customers by „word-of-mouth“ promotion. Loyalty programmes are already established praxis in service areas, but they have also been growing recently in retail business. The goal of this paper was to establish how CRM and loyalty programmes can influence the business result and competitiveness of the chosen two Croatian big retailers: Konzum as the biggest chain of retailers and dm as the leader in drugstore products. The main hypothesis is that loyalty programmes contribute to an increase in customer satisfaction and profitability of Croatian retail companies. The sample of fifty-one (N=51) Croatian consumers also took part in an online survey. The findings indicated that a loyalty programme is „very important“ to a fifth (19.6%) of respondents when deciding on where to shop. Besides, the material benefits in terms of discounts and rewards are „very important“ to a near third of consumers (31.4%) in creating satisfaction with individual loyalty programmes. While the variety of rewards is „sometimes important and sometimes not“ for almost three fifths (58.80%) of consumers, 45.10% of them deem the retailer's attitude „the most important“ or „very important“ in their satisfaction with a loyalty programme. The research has shown that 56.9% of consumers will recommend a retail chain, the loyalty programme of which they are satisfied with, to family, relatives and friends.*

**Keywords:** *consumer orientation, customer relationship management, loyalty cards.*

### 1. INTRODUCTION

Achieving satisfaction and enthusiasm in consumers is a strong competitive edge, and this is why Customer Relationship Management (CRM)<sup>25</sup> has become an inevitable part of modern-day business. CRM is a strategic orientation toward placing the focus on the consumer who is aware, informed and demanding. It is based on an integrated approach of market, sales and customer service management as key organisational functions. Being entirely integrated into a company's business strategy and information-technology system CRM becomes basis of effective and measurable method of gaining new customers and enhancing loyalty and satisfaction of the existing ones. Considering that customers represent the most valuable asset of retail companies, their success on the market and their future cash flow directly depend on

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<sup>25</sup> Hereinafter: CRM.

customer loyalty. Research has shown that the cost of acquiring new customers is five times larger than the cost of retaining the existing ones, and that even 68% of jobs fail due to a lack of after-sales contact (Perkov, 2015). This has sparked more intensive work on loyalty programmes aided by various marketing, sales and socio-psychological channels. Customer loyalty and enthusiasm are indicated in repeated purchase, greater understanding for possible errors, flexibility regarding price and recommendations by word-of-mouth. Introduction of loyalty programmes is common practice in the service sector, but their number has also been growing for the last several years in the retail sector.

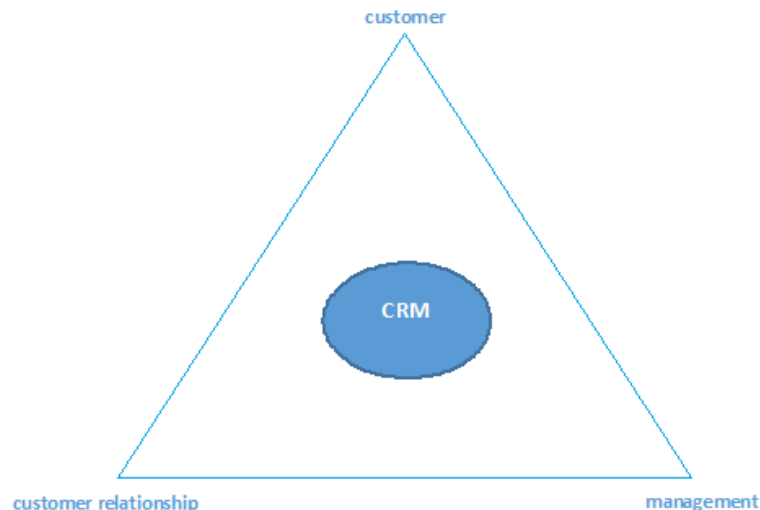
The goal of this paper was to present how CRM and loyalty programmes can influence the business result and competitiveness of two Croatian retailers. The main hypothesis is that loyalty programmes contribute to an increase in customer satisfaction and profitability of these Croatian retail companies. This paper was structured in five major chapters. The first chapter briefly introduces the topic of research and presents the paper structure. The second chapter elaborates the literature review of the relevant CRM concepts and is broken into two subheadings. The third chapter analyses the loyalty programmes and cards. The fourth chapter describes the research method and design, population, sample and methods to test the hypothesis. The fifth chapter presents the research findings. The sixth chapter summarizes key points of the paper.

## 2. LITERATURE REVIEW

CRM is based on an integrated approach to market, sales and customer service management as key functions of a company. According to Meler and Dukić (2007), it is a comprehensive approach to creating, maintaining and enhancing relationships with customers. Müller and Srića (2005) interpret CRM as a business strategy comprising the choice and management of attitudes toward consumers aimed at achieving long-term value for a company. Authors Gray and Byun (2001) break up CRM to three components: customer, customer relationship and company management (Figure 1).

*Customer* represents the primary source of profit and future company growth. *Customer relationship* includes a continued two-directional communication and interaction. *Management* needs to understand that CRM is not just an activity within the marketing department but involves constant corporate changes in the business culture, strategies and processes. The information obtained from customers is converted into corporate knowledge that leads to the use and understanding of the information and exploitation of market policies. The establishment of good parameters of each of the three components is essential to achieving the all-encompassing efficacy of CRM. The need for a CRM strategy, i.e. company orientation toward customers is grounded in the paradigm explaining that during their growth companies often shift focus of their business operations away from the customer, concentrating on their internal processes, products and services.

According to Kalakota and Robinson (2002), CRM is a company strategy integrating sales, marketing and after-sales services that depends on the coordination of all company departments. The point of developing an adequate CRM strategy according to Kraljević and Perkov (2014) is to create the desire in customers to interact with the company, to experience emotional connection with it and to boast the relationship among others.



*Figure 1. Three components of CRM (Gray, Byun, 2001, p.8)*

Customer orientation and customer-oriented communication has a significant impact on creating innovation. Its presence in the current strong competitive environment ceases to be a competitive advantage; however, the lack of it becomes a competitive disadvantage. According to Stachova and Stacho (2015) when the focus on customers is very low they are just anonymous buyers. Most organisations are at the next level because they have specified their key market segments. Organisations in the middle of the scale, named „hostages“, know detailed data about their customers and try to achieve their loyalty through credit cards, loyalty programmes, consumer coupons, warrantee cancellation in case a customer uses competitor's components or some other CRM activities. The highest level of customer orientation is represented by a situation when customers are partners, highly recognised by the organisation and their cooperation is supported by mutual trust based on open communication.

### **2.1. Emergence and development of CRM**

Sources say that 3,000 years ago facades of buildings in Babylon displayed signs advertising trades. Metaphorically, we can say that retention of customer loyalty began in the prehistoric era when Adam faced a fierce competitor, the snake, while competing for Eve's attention. Added value is seen at work when the snake convinced Eve in the benefits she would enjoy if she ate the forbidden fruit. And so Eve did!

The modern-day onsets of the CRM approach date back to the late 1950-s and are contributed to Drucker's view published in *The Practice of Management* (1954): „The purpose of a business is to create and keep a customer.” This succinct truth is an apt and insightful definition of CRM, but a lot has changed. CRM now involves technology, software, inbound and outbound marketing, lead acquisition, databases, multiple touch points, multi-channel marketing, enterprise solutions and social media.

The outset of retail business of the 20<sup>th</sup> century was based on knowing consumer habits, needs and wants. The relationship between the retailer and customer was expressed as 1:1 ratio. Retailers could identify themselves with consumers and make everything their customers need possible. Changes started happening in the second half of the century with the emergence of wholesale and mass production. Various goods became easily accessible so consumers were

buying now from one retailer, now from another. Today the retailer-customer relationship has returned to the way it was, to 1:1 ratio. The retailer uses modern communication technologies with the purpose of getting to know each individual customer to the greatest extent possible.

Customer relationship management is a term that refers to practices, strategies and technologies that companies use to manage and analyse customer interactions and data throughout the customer lifecycle, with the goal of improving business relationships with customers, assisting in customer retention and driving sales growth. CRM systems are designed to compile information on customers across different channels -- or points of contact between the customer and the company -- which could include the company's website, telephone, live chat, direct mail, marketing materials and social media. CRM systems can also give customer-facing staff detailed information on customers' personal information, purchase history, buying preferences and concerns.

## 2.2. CRM concept

The basic concept underlying CRM is customer orientation rather than product and service orientation. Müller and Srića (2005) divide CRM into three stages:

1. acquisition of new customers
2. increase in profitability of existing customers
3. retention of profitable customers throughout the lifecycle.

Acquisition of new customers is achieved by a differentiation of supply through innovation and conveniences such as sales promotion, bonuses, rewards and loyalty programmes. The reduction of operating costs per employee ensures larger investment in creating after-sales services. This retains, but also enriches purchase habits with the purpose of increasing the profitability of existing customers. The secret is not in the increase in the number of customers, but in their retention. With this the retailer ensures the Customer Long-life Value (CLV), which is calculated as a product of all purchases a retailer realises if they achieve lifelong retention of a customer. In this context we can view Konzum's slogan: „*With You through Life*“! For example, the value generated by customers who will spend a mere 50 USD a month means a total of 3,000 USD in five years. If the same customer shares their dissatisfaction with a dozen of other customers (half of which will immediately cease to purchase from that retailer), it would represent a potential loss of 15,000 USD!

Martinaga (2007) claims that companies today are not competing for market but for customer share, i.e. for mind share. This share represents an important element because it is where the choice of product is made. The development of customer loyalty also raises profit, because with each passing year the service costs decrease, and marginal profit increases. Loyal customers are becoming business „developers“. They begin buying more, they pay higher prices and bring new customers through verbal praise. The more the retailer learns from the customer, the better they get at personalising services (Perkov, 2015).

## 3. LOYALTY CARDS AND PROGRAMMES

Customer loyalty is mainly evidenced in repeated purchases. Uncles, Dowling and Hammond (2003) differentiate two key loyalty programme types: the *first* aims at increasing sales (and accordingly retailer's profit), and the *second* is used to maintain customer satisfaction through a more peaceful and intimate approach. Modern programmes and their loyalty cards (Passcard)

appeared in the 1980-s in Great Britain. Today most retail chains selling fast-moving consumer goods (FMCG) offer some sort of loyalty programme, including a corresponding card.

Depending on their wishes, organisations choose the methods of rewarding loyal customers. Each loyalty programme needs to be determined by time, and they differ from each other in continuity and linearity of rewards. Continuity means that the customer is rewarded with each purchase, i.e. when they reach a specific threshold. Linearity defines the relationship between the amount of purchases and the amount of rewards (Čičković, 2012). Loyalty programme rewards can be divided into economic and non-economic. Economic rewards are connected to various financial conveniences for the loyal customer (e.g. bonuses, discounts, free products and cash bonuses). Non-economic rewards are psychological in nature and place the loyal customer above everyone else. Loyal customers enjoy in first-purchase deals at closed events and priority in receiving information on sales promotions, discounts and the like. An example of such rewards is provided by the Peek&Cloppenburg loyalty programme and their P&C loyalty card.

Loyalty programmes have arrived in Croatia later than the rest of Europe. According to the Customer Protection Act (Official Gazette 41/14, chapter I, article 5), a customer is a physical person who enters into legal business or acts on the market outside his or her trade, corporate, craft or professional activity“. Meler and Dukić (2007) differentiate between B2B (*business-to-business*) customers and B2C (*business-to-customer*) customer relationships. While B2B relates to a legal entity or institution (non-profit organisation), B2C is the end-consumer, i.e. an individual or household.

Customer satisfaction and quality of services are determined in the area of business efficacy, and their growingly significant role has forced a lot of companies to do research in this area. Satisfied and motivated employees represent an important factor in customer service management. Namely, they transfer their own satisfaction to the customer by providing them higher quality services, which in turn enhances the company's business.

### 3.1. Loyalty cards in Croatian retail

The greatest presence of loyalty programmes is seen in medium-size and large retail enterprises. This form of competition represents a valuable source of knowledge used by retailers for market segmentation, determination of product range and outlets as well as the definition of characteristics of different target markets. The more a company learns about their customer the better it gets at providing personalised services. Therefore, social media represent the largest database of potential customers in the world as well as an inexhaustible source of information about their environment and behaviour. For example, by adding FacebookAds (paid advertisements on Facebook) a retailer can choose the target market they want to win over, depending on their age, interests and various other criteria (Kraljević, Perkov, 2014).

Knežević (2015) classifies retail company loyalty cards as basic (most frequent in retail companies used to follow trends in customer habits) and complex (models used by retailers to associate themselves with companies operating in different business activities; e.g. MultiPlusCard). The mentioned card is the most widely present loyalty card on the Croatian market with almost 1.2 million members, i.e. used by 66% of Croatian households. This is the first joint loyalty reward programme in Croatia initiated in 2010, which links several partners and provides users with the opportunity to achieve rewards with one purchase.

Konzum cooperates with a number of companies that are distinguished in retail as well as finance, tourism and telecommunication services (MultiPlus mobile, Konzum, Zagrebačka banka, Hrvatski Telekom, Tisak, Kozmo, Atlas, Allianz and Pevec).

This enables users to collect points at several completely different outlets. Loyal customers quarterly receive the MultiPlusCard Savings Booklet containing coupons and other savings offers by which they are rewarded by all partners participating in the programme. They are offered year-long convenient discounts, sales promotion prices, gifts, sweepstakes, reward points upon purchase and the like. The next in rank after the MultiPlusCard are Active Beauty card (*dm*) with over 900,000 members and the Billa Club card with over 600,000 members.

#### 4. RESEARCH METHODOLOGY AND SAMPLE ANALYSIS

The main working hypothesis of this paper was that loyalty programmes contribute to the increase in customer satisfaction and the profitability of Croatian retailers. This chapter describes the research method and design, population, sample and instruments. Using online service Google Forms and email, qualitative research was conducted during summer 2015 on the sample of 51 respondents aged from 20 to 56 years of age. 19.6% of them do not belong to any of the loyalty programmes, as many as 45.10% of them are members of 1 – 2 programmes and 35.30% participate in 3 or more loyalty programmes.

We used secondary and primary sources of information. Secondary sources included domestic and foreign scientific and professional literature, as well as relevant online databases. Primary information sources have been obtained through empirical research of loyalty programmes in Croatian retail companies. Using an online survey, 51 individual consumers were included. Key methods used in the conducted research include logical methods. Particularly the methods of analysis, synthesis, deduction and comparison were applied from this group of methods. Mathematical and statistical methods were also applied in this paper. The research of loyalty programmes of the two selected Croatian retailers were conducted by desk research method.

#### 5. FINDINGS

This chapter was designed to present the study results and evaluate findings in a way to test the stated hypothesis. Respondents answered 10 questions about the effect of loyalty programmes on customer satisfaction with retail chains in Croatia. For purposes of this paper we analysed the answers to only a part of the questions (Figure 2).

The responses indicate that a loyalty programme is „*very important*“ to nearly a fifth (19.6%) of customers upon deciding where to purchase. Additionally, the material benefits in terms of discounts and rewards are „*very important*“ for almost a third (31.4%) of customers in creating satisfaction with particular loyalty programmes.

Whereas the variety of rewards is only „*sometimes important and sometimes not*“ for almost three fifths (58.80) of customers, the retailer's attitude toward the customer is „*the most important*“ or „*very important*“ for almost half (45.10%) of the customers in creating satisfaction with a loyalty programme. The research also showed that 56.9% of customers would recommend a retailer to family and friends if they are satisfied with its loyalty programme.

Variable	Structure (%)
<i>Importance of loyalty programme upon deciding on the place of purchase</i>	
It is the most important	5.9
It is very important	19.60
It is sometimes important and sometimes not	43.10
It isn't important at all	33.40
<i>The effects of material benefit value of the loyalty programme on customer satisfaction</i>	
It is the most important	3.90
It is very important	31.40
It is sometimes important and sometimes not	47.10
It isn't important at all	17.6
<i>The effects of appeal, innovation and variety of rewards of the loyalty programme on customer satisfaction</i>	
It is the most important	0
It is very important	27.50
It is sometimes important and sometimes not	58.80
It isn't important at all	13.70
<i>The effects of the retailer's attitude toward the customer as member of loyalty programme</i>	
It is the most important	3.90
It is very important	41.20
It is sometimes important and sometimes not	39.20
It isn't important at all	15.70

Figure 2: Importance and number of loyalty programmes, effects of material benefits, appeal of rewards and effect on customer relationship (n=51)

According to another recent study (Futivić, 2015) conducted online with 102 Croatian citizens, as much as 79% of them have used a loyalty card by a retail company. 70% among them claimed that a member of their family has also used loyalty cards. In relation to the number of cards used, 45% of them use 2 to 3 cards, 30% of them use only one, 15% use 3 to 5 cards and 10% of our citizens use more than five loyalty cards. With regard to the connection of their shopping habits and the use of loyalty cards, 74% of Croatian consumers responded that they use loyalty cards by issued by their favourite retailers.

For the purposes of this paper, we conducted a comparative analysis of loyalty programmes of two selected retailers operating on the Croatian market: Konzum – as the leading retail chain for fast-moving consumer goods and dm (drogerie-markt) – as the leading drugstore retailer. The objective of comparison was to determine how these retailers introduce loyalty programmes in their business.

### *Konzum*

Konzum is the market leader in Croatian retail with a market share of approximately 30%. In their corporate mission they emphasise their desire to provide each customer with the best possible value for money through high quality service and satisfaction with purchase as well as carefully selected range of quality products with emphasis on fresh, healthy and domestic products (www.konzum.hr). With the purpose of better understanding customer needs, they



invested significantly in the informatisation of business processes, the electronic access to customers and analysis of data obtained. They implemented the „Seven CRM“ programme to modernise the call centre, to manage communication channels more effectively, to enhance the Plus Card functionality, to support users and to automatize information processes. Through their many services (MultiPlusCard, gift card, mobile apps, *web shop* delivery, m-buy, Internet store, PoKupi service, call centre and Freephone number), they wish to provide customers with the best value possible, as they claim in their mission. Customers can use their *online* services to get fast answers to their questions on products and services or file complaints and commendations. Their Facebook page has over 203,000 users.

The MultiPlusCard is the first joint loyalty reward programme in Croatia initiated in 2010, which links several partners from the retail, finance, tourism and telecommunication service area. It enables users to collect points at several completely different outlets ([www.multipluscard.hr](http://www.multipluscard.hr)). Throughout the year members are offered convenient discounts, sales promotion prices, gifts, sweepstakes and rewards by all partners.

### *dm*

This is one of the largest drugstore chains in Central and Southeast Europe. The first store in Croatia (Zagreb) was opened in 1996, and today it has 154 store throughout the country ([www.dm-drogeriemarkt.hr](http://www.dm-drogeriemarkt.hr)). The product range includes over 15,500 drugstore products related to health and beauty, baby food and baby care, household, photo services and additional product range. Its corporate mission places people at the centre of everything they do, regardless of them being customers or employees. They are amongst the most favourable employers, giving gifts for all employees' children under the age of 15, bestowing jubilee awards, benefits with years of service, financial aid for deaths in the family or severe illnesses (Krilčić Fostač, 2010).

With their slogan „*Here's where I'm a human being. Here is where I shop*“ the customer is the focus of attention. The implementation of their loyalty programme and the function of a more effective customer management is based on the continued enhancement of the CRM system through following trends, wishes and habits of existing and potential customers. They communicate through catalogues, newsletters, web pages and smart phone apps about numerous shopping advantages. The Active Beauty loyalty programme provides them with a better connection with customer needs and encourages them to help the local community, to act ecologically and to care about health. This is why the programme includes direct communication, which is ensured by the *dm* Facebook page with over 295,000 users. According to the level of complexity (Knežević, 2015), the *dm* programme uses a more complex model based on the application of highly developed information technology. It has around 900,000 members, which has made them market leader on the drugstore market for 18 consecutive years.

## **6. CONCLUSION**

This paper assesses loyalty programs in Croatian retail business. The goal was to present how CRM and loyalty programs can influence the business result and competitiveness of the chosen two Croatian leading retailers. The main hypothesis was that loyalty programmes contribute to the increase of customer satisfaction and the profitability of Croatian retail companies. From our recent study conducted among fifty-one Croatian consumers it follows that:

- A loyalty programme is „very important“ to a fifth (19.6%) of customers in deciding on the place of purchase
- Material benefits (discounts and rewards) are „very important“ for the satisfaction of almost a third (31.4%) of customers.
- The retailer's attitude toward the customer is „the most important“ or „very important“ for almost half (45.10%) of the customers in creating satisfaction with a loyalty programme.
- 56.9% of customers would recommend a retailer to family and friends if they are satisfied with its loyalty programme.
- Only 30% of Croatian customers own one loyalty card, and 10% of them own more than five cards.
- Two thirds of Croatian households use the MultiPlusCard.

The synergy of activities of all partners in the programme and the marketing-information-analysis team of the company greatly contributed to the growing presence of the MultiPlusCard, which is also enhanced by the most numerous and fast-growing database of Konzum's customers as a powerful CRM tool facilitating adaptation of supply to the needs of each individual. Although the data on the presence of loyalty cards on the Croatian market show impressive results, their massiveness comes into question because they have become standard and not a differentiation factor among retailers.

Considering the limitations which derive from inadequate number of respondents, the results of this research need to be taken with a grain of salt, i.e. they should not serve as the basis for making general conclusions about loyalty cards of Croatian retailers. However, the results are quite indicative and statistically reliable for deeper understanding of the importance of CRM in modern trading. In conclusion, this research might deserve an expansion with a larger sample in the future in order to make strong and general statements about CRM perspectives in the Croatian retail sector.

## LITERATURE

1. Čulo Petrovčić, J. (2010). Odnos prema zaposlenicima i obitelji. U: Tudor, G. (ur.), *Vođenje i motiviranje ljudi: Kako nadahnuti svoje ljude* (str. 278-281). Zagreb: MEP Consult.
2. Fostač Krilčić, A. (2010). dm-drogerie markt: Materijalna i nematerijalna motivacija. U: Tudor, G. (ur.), *Vođenje i motiviranje ljudi: Kako nadahnuti svoje ljude* (str. 26-29). Zagreb: MEP Consult.
3. Futivić, G. (2015). Analiza programma vjernosti u funkciji učinkovitog upravljanja odnosima s potrošačima u hrvatskim trgovačkim poduzećima (spec. dipl. rad). Zagreb: Veleučilište VERN'.
4. Gray, P., Byun, J. (2001). *Customer Relationship Management*. Irvine: University of California.
5. Greenberg P., (2010). *CRM at the Speed of Light: Social CRM Strategies, Tools and Techniques for Engaging Your Customer* (4<sup>th</sup> ed.). The McGraw-Hill Companies.
6. Kalakota, R., Robinson M. (2002). *e-Poslovanje 2.0*. Zagreb: Mate.
7. Knežević, B. (2015). *Dilema o korisnosti programma vjernosti u trgovini na malo*. Zagreb: *Suvremena trgovina*, 40(1), 1-68. Retrieved March 15, 2015. from: <http://issuu.com/st-1-2015-online/docs/suvremenatrgovina-1-2015-online/49>

8. Kraljević, R. Perković, D. (2014). *Menadžment tržišnih komunikacija*. Zagreb: Plejada.
9. Meler, M., Đukić, B. (2007). *Upravljanje odnosima – od potrošača do klijenta (CRM)*. Osijek: Ekonomski fakultet u Osijeku.
10. Müller, J., Srećić, V. (2005). *Upravljanje odnosom s klijentima*. Zagreb: Delfin.
11. Martinaga, V. (2007). Upravljanje odnosom s klijentima u funkciji povećanja izvoza lijekova (magistarski rad). Zagreb: Ekonomski fakultet Sveučilišta u Zagrebu.
12. Perković, D. (2015). *Upravljanje odnosima s klijentima* (uručnik ppt prikaza s predavanja). Zagreb: VERN'.
13. Stachová, K., Stacho, Z. (2015). The lack of customer orientation is becoming a competitive disadvantage. *Quality and Competitiveness, 16 th International Symposium on Quality* (March, 18th-20th). Proceedings (ed. M. Drljača), pp. 3-15. Zagreb: Croatian Quality Managers Society.
14. Uncles, M. D., Dowling, G. R., Hammond, K. (2003). Customer loyalty and customer loyalty programmes. *Journal of consumer marketing*, 20(4), pp. 294-316. Retrieved October 15, 2015. from:  
<http://www.emeraldinsight.com/doi/pdfplus/10.1108/07363760310483676>
15. [www.dm-drogeriemarkt.hr](http://www.dm-drogeriemarkt.hr)
16. [www.konzum.hr](http://www.konzum.hr)
17. [www.multipiuscard.hr/](http://www.multipiuscard.hr/)

## RETROSPECTIVE ANALYSIS OF DEVELOPMENT OF TOURISM IN CROATIA

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### ABSTRACT

*Croatia is still defined as the land of sun and sea, which ultimately means uniformity in touristic offer and limitations in its further development. However, the opportunity for a change in the way of conducting business, related to a mass apartmanization and the uniformed offer of the accommodation, has been recognized by small and family hotels. In the last few years, small and family hotels have significantly improved the quality of its services. This paper analyzes and evaluates the development of tourism in the Republic of Croatia from 1990 to today, with a special emphasis on the economic functions of tourism, especially the influence of development of tourism in the overall economic development of the Republic of Croatia.*

**Keywords:** *Croatia, economic development, small and family hotels*

### 1. INTRODUCTION

Understanding of the system correlation between tourism and the economy is not accidental, but arises from the fact that Croatia is a touristic country, and is considered to be one of the most desirable tourist destinations, which is why the successful development of tourism certainly contributes to the successful development of the Croatian economy as a whole.

However, we must keep in mind that a contemporary tourism development is threatened with permanent change of market demand and that the users of tourist services are becoming more demanding on a daily basis, which is why the offer in the sector of tourism should be enriched and adjusted to the maximum to all kinds of tourist demand.

Due to intensifying competition on the international tourism market, business within the industry of tourism is becoming very complex. Nevertheless, according to the financial and physical indicators of the arrival of guests, Croatian tourism confirms its strength year after year. This is especially true of small and family-run hotels which are a vital element of the tourism offer in our country. Due to changes in the market, where the various forms of mass tourism market are increasingly turning to individuals and smaller groups, small family hotels have become the most important pillar in the development of new forms of the tourism. The current circumstances and new imposing trends are putting a major strain on their success, they which makes entrepreneurs and management striving to find new ways in a market struggle.

Croatia is still defined as the land of sun and sea, which ultimately means uniformity in touristic offer and limitations in its further development. However, the opportunity for a change in the way of conducting business, related to a mass apartmanization and the uniformed offer of the accommodation, has been recognized by small and family hotels. In the last few years, small and family hotels have significantly improved the quality of its services.

The offer of small and family-run hotels today is very diverse, and enriched with additional facilities, including the authenticity and tradition of their settlements and towns. Small family hotels are additionally involved in the organization of events outside the main tourist season, which helps developing congress tourism. They are also involved in the organization of various events throughout the year.

## **2. THEORETICAL AND ECONOMIC ASPECTS OF CONCEPTUAL DETERMINATION OF TOURISM**

At the beginning of this section it should be noted that there is no single theoretical-scientific definition of the term "tourism" to this date, which speaks volumes about the complexity of the tourism. On the other hand that fact additionally increases researching interest for the topic and provides an opportunity to all potential researchers to contribute and enrich the content of the term "tourism". In next few paragraphs few definitions of "tourism" are presented;

"Tourism is a set of relations and phenomena arising from travel and stay of visitors of a certain place, if this stay will not result in a permanent residence and if such area is not linked to any of their economic activity." (Krapr, 1963, p. 29)

First official definition of tourism in Croatia is considered to be the definition published in the regulations for the improvement of places of tourist interest, regions and spas important for tourism in the Sava Banovina, dating from the year 1933: "Tourism in a wider sense is primarily economic handicraft which is aimed at creating favorable conditions for the travel and stay of visitors in places and regions which for its natural characteristics, folklore, traditional costumes, religious cult, cultural objects and collections, or cultural significance or economic importance or sporting events provide a particular interest and appeal." (Antunac, 1978, doctoral dissertation).

"One cannot ignore the fact that interest in tourism arises from its economic importance, especially in the current phase of economic expansion, the economic factor is an indicator of psychological, sociological, the cultural, geographical and technological views on tourism. This basic truth must be kept in mind." (Svetlačić, 1995, P.135-136).

"The very concept of tourism is usually defined as a set of relations and phenomena related to the activities of persons traveling and staying in places outside their permanent residence, up to a year, for leisure activities, business and other reasons." (Vukonić,B., Čavlek.N.,(2001), P.408).

"One of the main features of the modern tourist market is intensifying competition among the tourist destinations. In order to be competitive in the global tourism market, a tourist destination must be innovative, and to achieve the necessary innovation, it must continually seek new sources of comparative advantages. Those kinds of competitive advantages may, in the form of new tourism products and services, provide a stable and long-term sustainable growth and development for a tourist destination." (Krešić, 2007, P.1-100).

The above definitions imply that the researchers interpreted the "term" tourism "with regard to the purpose and a goal in which the term is used, but it should also be noted that each of these guidelines should be put in the context of time and space in which it had been made. However, we can also conclude that tourism is a complex phenomenon that contains everything that is associated with the travel and stay of people in the other place, which is why tourism should be seen as a social phenomenon with a significant role in the development of social relations, but also emphasizing the economic importance of tourism and its role and contribution to the economic development of each national economy.

### **2.1. Economic functions of tourism**

Although tourism by itself does not produce any tangible product, it is an undeniable fact, however, that tourism has such an economic strength that is capable of reviving effect on production and trade in many fields of activity. There is a direct effect on many people (those who come into direct contact with tourists) and there are also a lot of people who feel this effect indirectly. For that reason the singular form in those names is not accurate, because it is unambiguous, because of the effect of tourist consumption affects a large number of different economic activities. Only with such explanations we can use the usual terms such as conversion, because until now it was not possible to find a scientifically unambiguous common terms. As a consumer, a tourist is a factor of distribution and redistribution of national income (through part of the personal income). The consumption of tourists encourages spillover of income in large amounts on the national and international scale. By spillover of the income, tourism has the function of establishing economic balance between regions, and countries, with different economic potential and level of economic development. Through tourism spillover is generally moving towards economically undeveloped and underdeveloped areas. Tourist spending becomes economic force that strengthens increases and accelerates production. Since tourists largely require services, they create a strong possibility of employment of the new and diverse workforce. In addition to increasing the demand quantitatively, such tourists are looking for quality and better service, and its costs above average. From there arises the possibility that in the resorts for the same product and for the same services a higher prices can be achieved than in the non-touristic places. This is only one kind, or type of rent. Tourism, however, also enables the achievement of other forms of rent, which still needs to be further explored. Tourist consumption is functionally associated with personal income, and the personal income with the national income. Managing a certain amount of personal income is only one of the prerequisites for an individual involved in the tourist trade. There is, however, a number of other factors of which depends on whether the individual is really involved in the tourist trade, which makes the totality of habits of the tourists. The study of the structure and size of the budget of the tourists is very important, because in this way the average daily consumption and overall tourist spending can be determined, as well as parts of the consumption regarding the economic activities that directly provide services to tourists. It is important to establish the size of tourist spending in each of these economic activities which "supply" activities that directly absorb the tourist spending.

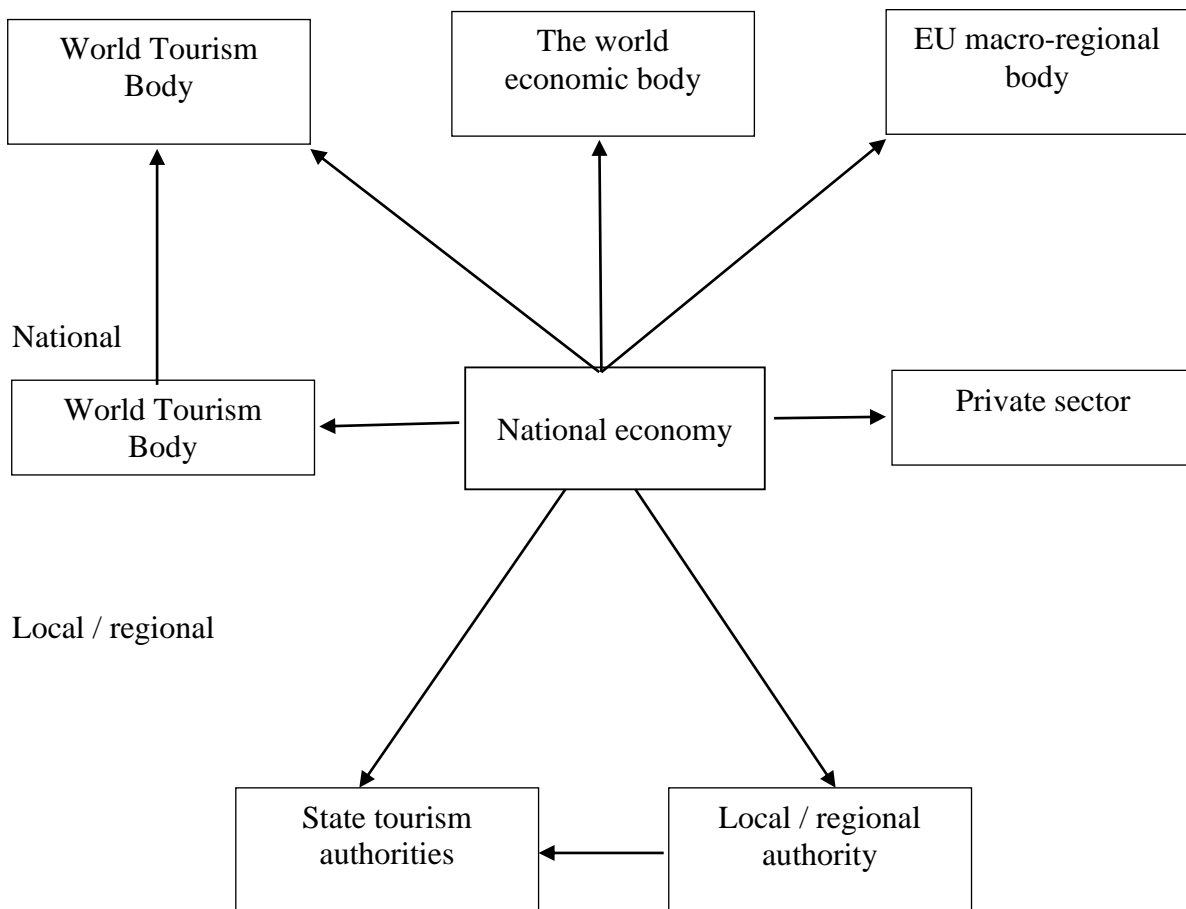
A comprehensive economic trend driven by tourist traffic reflects the state finances through increased revenue from taxes, fees and the like. Catering and hotel industry are the most important economic activities relevant to tourism. Their economic situation is unstable, and therefore the interest of the state is to help to maintain their economic balance." (Svetlačić, 1995, p.65-67).

### **3. INTERDEPENDENCE OF MACRO AND MICRO LEVEL IN THE DEVELOPMENT OF TOURISM**

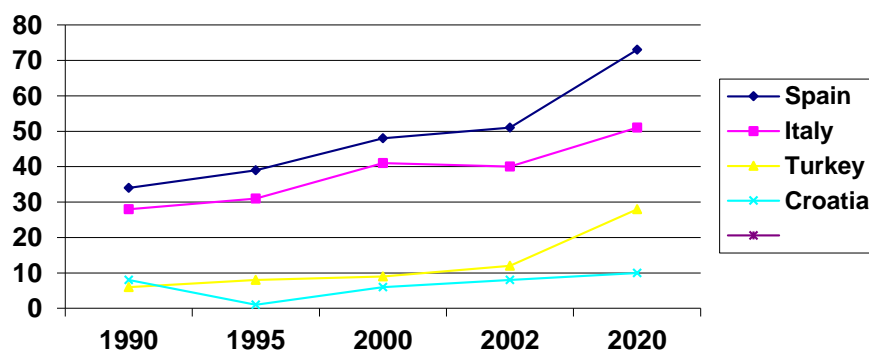
The economy of any county, including Croatia, consists of regional units whose sum, together with the government units, form the overall economy. Regional tourist policy encompasses its diversification in the sector of tourism, contributions, distribution and allocative function of the market and the competitiveness development.

Table 1: Interdependence of micro and macro levels of management in tourism (Shaw, G., Williams, A.M., 2014, p.80).

International



The limiting factor for the growth and development of tourism in the Mediterranean countries is mass tourism, and many other symptoms, for example lagging on responding to the modern tourist needs. Holidays in the Mediterranean are usually connected with: natural beauty as a primary tourist attraction, and the sun, and the sea which attracts a lot of tourists, but still with limited growth potential. On the other hand, since we are expecting the younger population of tourists from different countries, most of the tourist regions of Croatia strive to raise the quality of services with orientation to authentic offer of the region combined with modern content.



Graph 1: Croatia to competing countries from 1990 to 2020; international tourist arrivals in the millions. (Gržinić, 2006, p.138)

According to the information provided in Graph 1, all the Mediterranean countries have pursued and achieved the estimated growth. Spain and Italy have the largest number of tourist arrivals in the period from 1990 to 2020. They are followed by Greece and Turkey, countries which are experiencing the intensification of tourist arrivals in the period from 2002 to 2020. Most of the Mediterranean countries are losing visitors because of Turkey which attracts many tourists as a new destination. When it comes to the number of tourists coming to this country, with an annual growth rate of 23%, it is highly expected that this destination could catch up with Spain, even overtake the position of Spain, and become a leading destination for holidays in Europe. Most European tourists come from Britain and Germany. Nearly a fifth of those tourists visited Greece in 2003, but Turkey used very shrewd campaigns (primarily low prices) and in the following years attracted them to visit Turkey instead. However, in 2011 and 2012, due to financial, but also political problems, Greece lost its place in the tourist market. The advantage of Croatia lies in the fact that for most European tourists, with the same number of days, accommodation category and expenses outside the accommodation, Croatia still offers cheaper holidays than in those countries where the cost of tourist services are calculated in US dollars. Another advantage is that they can come to Croatia by car. On the other hand, unfortunately, Croatia was absent from tourist markets of Europe for almost 13 or 14 years, and the younger generation of tourists hadn't had the opportunity to get acquainted such an interesting destination.

#### **4. ANALYSIS AND EVALUATION OF DEVELOPMENT OF TOURISM IN CROATIA SINCE 1990**

"The key" organizations to promote the development of tourism in Croatia are: the Ministry of Tourism, Croatian National Tourist Board with the tourist boards system at the regional level, which is regulated by legislation (Law on Tourism Associations, 1991). Ministry of Tourism, which has changed names and departments as the supreme government body is responsible for:

- Tourism policy of the country as part of the general economic policies
- Investments in tourism
- Tourism landscaping policy
- Encouraging the development of specific forms of tourism
- International cooperation in tourism
- The monitoring and analysis of business tourism economy, and quality of the tourism product and others. " (Čavlek, Bartoluci, Prebežac, 2011, p. 429)

Because of the war in Croatia, the period from 1991 to 1995, was very unfavorable for the development of the economy in general, and particularly unfavorable for the development of the tourism. In spite of these difficulties, however, in this period comes the legal framework of the tourism sector was established:

- Law on Catering
- Law on Tourism
- Law on Tourism Boards
- The process of establishment of the Croatian Tourist Board

After the War, the process of reconstruction of tourism facilities began. The goal of this process was raising the tourism to a higher level of quality. Croatian tourism is, in fact, going through a negative period until the year 2000 due to the post-war suspicious privatization, and the lack of growth of the entire Croatian economy.

Since the year of 2000, the Republic of Croatia achieved significant growth in tourism, and was



not left behind foreign tourist destinations until few years ago. B. Vukonić evaluates the situation in this way: "In a global assessment of the entire period of development of Croatian tourism it seems to be justified to claim that in the initial stages of development, Croatia had not lingered for global development trends, as it happened in subsequent periods. Although the whole process of the development clearly notes undoubted progress from year to year, which had been indicated by almost all indicators, Croatia is still lagging behind in comparison to the Mediterranean, Europe and most of the world." (Vukonić, 2005, p. 204). The tourist market nowadays constantly increases the number of potential new tourist destinations, and offers a varied and rich offer in existing tourist destinations, which encourages strengthening of the competitiveness of all segments of tourism.

"Competition of tourist destinations in international markets is increasing every year, and there is a fight for costumers between a growing numbers of destinations. Since the process of adapting our tourism offer to the requirements of foreign tourist demand has been stopped by the war in Croatia. Croatia now faces a period of rapid adaptation and innovation of our tourism product to new requirements of the demand. In the meantime the demand has changed and a lot, and even traditional tourism trends are changing faster."(Bartoluci, Čavlek, 2000, 12(2)).

"Staying in the sun by the sea" (eng.Sun, Sea, Sand), SSS is a type of tourism that dominates the world tourist destinations even today, but at the end of the last century began the so-called process of diversification of the tourism product. At that time starts a development of new types of tourism in accordance with the increasingly demanding needs of the consumer, ie, in accordance with increasingly demanding conditions of the tourism market. Croatia is also trying to follow such trends. New types and forms of tourism appear:

- Nautical tourism
- Rural tourism
- Health tourism
- Transit tourism
- Other forms

Although the dominant motive for a holiday is the sun, sea, beautiful beaches, there is an increasing demand for a challenging, eventful stay which is usually associated with the possibility for active holidays, especially in the trend marked walking routes, all kinds of water sports and golf." (Čavlek, 1997, 16(2)). In Čavlek and M. Bartoluci point out that the sport has become a very important segment of development in tourism, and that the desires of today's modern tourists are more oriented toward a vacation of a more substantial kind. (Bartoluci,Čavlek, 2007).

Although Croatia is trying to keep up with global travel trends, the dominant form of tourism in Croatia is still leisure tourism. Such kind of tourism is the most common due to the natural beauty of our coastline on the Adriatic Sea, and a high degree of coastline indented, with more than a thousand islands.

From the data presented in Table 2, in 2008 there were 11,261,000 arrivals of the tourists, including 1.846 million domestic tourists and 9,415 million of foreign tourists. There was a 57.103 million overnight stays. There were 6.478 million overnight stays by domestic tourists and 50.625 million overnight stays by foreign tourists. In 2008, in comparison to the previous year, a growth of 1% in the number of arrivals is noted and an increase of 8% in the number of overnight stays. There is a large rise of Croatian tourism in 2008 comparing to data from 2000.

There is a noticeable growth in the number of arrivals compared to the year 2000, and it is 58%, and the number of overnight stays is 46%. These data show that Croatia has made a significant increase in financial terms, which leads us to the conclusion that the offer and diversify managed to raise the level of quality of tourist offer, and the level of quality of the promotion of Croatian tourism. From the table below we can see that Croatia is mainly oriented to foreign guests who in 2008 accounted for 84% of total arrivals and 89% of total overnight stays.

*Table 2: Arrivals and overnight stays 1975-2014 (000), Central Bureau of Statistics, Ministry of Tourism of the Republic of Croatia*

Year	Arrivals			Overnight stays		
	Total	Domestic guests	Foreign guests	Total	Domestic guests	Foreign guests
<b>1975.</b>	6.454	1.229	5.225	42.411	6.375	36.036
<b>1980.</b>	7.929	1.486	6.443	53.600	7.750	45.850
<b>1985.</b>	10.125	1.790	8.335	67.665	8.790	58.875
<b>1990.</b>	8.497	1.448	7.049	52.523	6.747	45.776
<b>1995.</b>	2.610	1.125	1.485	13.151	4.388	8.763
<b>2000.</b>	7.137	1.305	5.832	39.183	5.138	34.045
<b>2005.</b>	9.995	1.528	8.467	51.421	5.434	45.987
<b>2006.</b>	10.385	1.726	8.659	53.007	5.985	47.022
<b>2007.</b>	11.162	1.856	9.306	56.005	6.431	49.574
<b>2008.</b>	11.261	1.846	9.415	57.103	6.478	50.625
<b>2009.</b>	10.934	1.599	9.335	56.299	5.799	50.500
<b>2010.</b>	10.604	1.493	9.111	56.416	5.424	50.992
<b>2011.</b>	11.456	1.529	9.927	60.354	5.603	54.751
<b>2012.</b>	11.835	1.466	10.369	62.743	5.221	57.522
<b>2013.</b>	12.443	1.485	10.958	64.818	5.138	59.680
<b>2014.</b>	13.128	1.505	11.623	66.484	5.160	61.324

B. Pirjevec points out the following: "The foreign tourist consumer brings to the chosen tourist destination funds in personal consumption, or part of the funds intended for the personal consumption as a tourist, noting that his income was earned in his home country. This has been an outflow of the money supply, with immediate inflow, and the direct increase of the national product and hospitable tourist destination, after the spending of the tourist." (Pirjavec, 1998, p.112). We can see easily notice how the War made the number of tourists decrease, but in the postwar period it continued to grow. Although the habits and possibilities of modern tourists altered significantly, Croatia is trying to follow global tourism trends and developments and seems to be successful at it. Tourist arrivals and overnight stays by accommodation facilities are shown in the tables below.

According to the type of accommodation presented in Table 3, in 2008 the total number of arrivals recorded the highest turnover in hotels (4,157,000), followed by private households (2,533,000) and camps (1,942,000) and resorts (599 thousand). According to the data hotels generate 37% of total arrivals, accommodation achieves 22%, then 17% of camps and resorts 5%.

It is obvious that the accommodation has a very high percentage of arrivals compared to the hotels, even though hotels provide greater opportunities for satisfying the needs of guests due to the hotel facilities, management and organization.

*Table 3: Tourist arrivals by types of accommodation facilities (000), Central Bureau of Statistics, Ministry of Tourism of the Republic of Croatia*

Year	Hotels	Tourist resorts and settlements	Camps	Private rooms Households	Spa	Resorts	Hostels	Nautical ports	Other	Total
<b>1975.</b>	2.923	367	1.031	923	20	484	190		516	6.454
<b>1980.</b>	3.386	457	1.567	1.067	16	516	221		699	7.929
<b>1985.</b>	4.179	700	2.113	1.409	35	682	229		778	10.125
<b>1990.</b>	4.204	684	1.456	823	38	532	147		613	8.497
<b>1995.</b>	1.397	263	365	108	15	45	24		221	2.438
<b>2000.</b>	2.812	614	1.521	1.214	30	65	55	517	309	7.137
<b>2005.</b>	3.702	666	1.934	1.982	22	88	89	773	739	9.995
<b>2006.</b>	3.848	671	1.856	2.181	28	94	102	725	880	10.385
<b>2007.</b>	4.106	634	1.949	2.495	39	92	116	811	920	11.162
<b>2008.</b>	4.157	559	1.942	2.587	36	83	118	808	1.208	11.261
<b>2009.</b>	3.952	436	2.038	2.606	29	71	123	664	1.016	10.935
<b>2010.</b>	4.158	434	2.062	2.683	28	55	134	x	1.050	10.604
<b>2011.</b>	4.538	421	2.231	2.935	27	52	146	x	1.106	11.456
<b>2012.</b>	4.665	420	2.342	3.032	27	41	164	x	1.144	11.835
<b>2013.</b>	4.839	413	2.394	3.226	31	33	233	x	1.242	12.441
<b>2014.</b>	5.052	420	2.384	3.595	34	19	285	x	1.339	13.128

It seems that in Croatia the trend of tourist staying in the family hotels and small hotels that have emerged from private family accommodation is getting stronger and stronger. Unlike the traditional hotel accommodation, these small hotels are providing guests with a personalized approach and the authentic atmosphere of the region in which the customer resides. According to the table below tourists prefer accommodation in small hotels more than anything else offered in the tourist season, which works favorably for the development of small and family-run hotels. According to the data below, in private houses there were 18,557,000 overnight stays, in hotels 15,221,000, 13,349,000 in the camps and in the resorts 3,688 million. From the total number of overnight stays accommodation has 32% share, followed by hotels with 27%, and camps with 23% and Resorts with 6%. Of the total number of achieved overnight stays private accommodation reached 32%, followed by hotels with 27%, and camps with 23% and Resorts with 6%

*Table 4: Overnight stays of tourists by type of accommodation facilities (000), Central Bureau of Statistics, Ministry of Tourism*

Year	Hotels	Tourist resorts and settlements	Camps	Private rooms	Spa	Resorts	Hostels	Nautical ports	Other	Total
<b>1975.</b>	14.350	3.313	7.816	8.531	327	4.925	2.044		1.105	42.411
<b>1980.</b>	17.521	3.937	12.804	10.406	327	5.135	1.975		1.495	53.600
<b>1985.</b>	20.975	5.466	17.150	13.383	593	6.190	2.106		1.802	67.665
<b>1990.</b>	20.716	5.198	12.010	7.375	617	4.412	1.245		950	52.523
<b>1995.</b>	5.587	1.972	3.429	840	162	303	192		400	12.885
<b>2000.</b>	13.164	4.561	10.740	8.325	253	475	340	777	548	39.183
<b>2005.</b>	14.960	4.703	13.359	13.859	203	552	334	1.139	2.312	51.421
<b>2006.</b>	14.764	4.532	12.905	15.381	211	563	356	1.210	3.085	53.007
<b>2007.</b>	15.200	4.173	13.017	17.676	278	571	375	1.378	3.337	56.005
<b>2008.</b>	15.221	3.688	13.349	18.557	260	548	367	1.435	4.839	57.103
<b>2009.</b>	14.317	2.833	13.796	18.816	213	460	380	1.311	5.227	56.301
<b>2010.</b>	15.045	2.790	13.793	19.407	198	348	434	x	5.381	56.416
<b>2011.</b>	16.145	2.717	14.841	21.103	167	331	460	x	4.590	60.354
<b>2012.</b>	16.521	2.740	15.882	21.777	200	246	495	x	4.882	62.743
<b>2013.</b>	16.752	2.609	16.262	22.539	199	179	650	x	5.648	64.818
<b>2014.</b>	16.641	2.622	16.156	24.261	220	116	692	x	5.776	66.484

Tables show the increase in the number of arrivals and the number of overnight stays to all types of accommodation facilities. Especially interesting is the number of overnight stays in private accommodation. This increase is clearly palpable in relation to the year 2000 when the Croatian tourism had finally gotten better after the war. In the segment of private accommodation number of overnight stays in 2008 compared to the year 2000 increased for 10,232,000, while the number of arrivals was increased for 1.319 million. It is obvious that there has been a rise in the number of private accommodation from which small family hotels arose, and there was also a significant increase of the share of tourist traffic in this segment of tourism.

## 5. SUGGESTION OF MEASURES FOR MORE EFFICIENT TOURISM DEVELOPMENT IN CROATIA

The modern way of life, including everyday chores and personal interest, impose the need for some rest and recreation, in order to make the everyday life easier and more fulfilling. It is an undisputed fact that the high technological development has strongly influenced the development of tourism as a whole. The tourism of a modern civilization encompasses the broadest social classes and promotes a positive and productive behavior of consumers through a variety of human activities. Performing simplest activities, such as hobbies, active participation in various cultural events helps creating new ideas and new value criteria and enriches the individual. The attention of a modern man is increasingly focused on tourism in order to reduce a daily stress or to satisfy the desire for adventure.

At the same time entrepreneurs are trying to develop an offer in accordance with the needs of tourism consumers. Although the period from 1990 to date clearly notes unambiguous growth and progress of Croatian tourism from year to year, the competition of tourist destinations in the global market is growing faster. In order to achieve better results in the tourist industry of

Croatia, it is necessary to:

- Simplify and speed up the administrative measures, in order to attract foreign and domestic capital and to make the implementation of investment projects within the set time frame;
- Provide business loans with better government incentives to raise the quality of hotel and catering services;
- To develop tourist facilities for which there is the greatest demand on the global market;
- Invest in the training and education of touristic employees;
- To work on promoting tourism in various segments: through travel agencies offering various tour packages, through tour operators who pre-leased accommodation, transport and other facilities; through the websites that are most popular at the moment;
- Create unique image of the destination that will be distinctive, specific and original.

These measures will contribute not only to the development of tourism, but also the Croatian economy as a whole, given that tourism enables the valorization of free natural resources, such as climate, air, beautiful landscapes and the like, and thus acquires an economic value. In that way tourism elevates, and helps developing a market for local products and services and as a side-effect increases employment.

## 6. CONCLUSION

Business today makes a fundamental determinant of economic development in each national economy and Croatia is not an exception. Innovations are becoming more complex with regard to changes in the political, legal, social and technological segment. The change becomes law, and small companies present a challenge in the modern enterprise, on account of their flexibility and innovation. For the successful development of tourism in Croatia, macroeconomic stability and economic success are the basic guidelines. Review and analysis of the data in this study indicate a permanent increase in the number of arrivals and overnight stays in Croatia, which certainly would not happen without the introduction of additional investment in tourist facilities, and the introduction of new tourist facilities, additional attractions and innovative design, not to forget the indigenous tourism product. Challenges are constantly occurring on modern markets, and Croatia has to successfully face them, especially in a new, and more demanding conditions. Small family hotels are a novelty in the Croatian tourist offer. Croatia is traditionally a successful tourist destination, but I think that because of its geographical location, natural and cultural attractions, as well as available resources, our country should be able to achieve much better financial results. In order to become competitive in the international market, modern companies indicate the necessity of continuous finding of the new ways of competitive struggle. Since the modern market is extremely turbulent, flexibility of the business is crucial. Many tourist theoreticians and practitioners point out that the small family hotels, because of their flexibility of their business operations, are the key factor for the future of Croatian tourism. Small and family-run hotels are characterized by high quality services, and they are also nurturing the authenticity of their region. The ancient spirit of the place can be experienced in every hotel, through a differentiated and personalized service customized by the requirements of its guests.

## LITERATURE

1. Antunac, I., (1978), Sporno mjesto turizma u ekonomskoj teoriji, doctoral dissertation, EF, Zagreb.
2. Vukonić, B., Čavlek. N., (2001) Rječnik turizma, Masmedia, Zagreb.

3. Barotluci, M., Čavlek, N. (2000), Ekonomska osnova razvoja golfa u hrvatskom turizmu: perspektive i zablude, *Acta turistica* 12(2).
4. Bartoluci, M., Čavlek, N., (2007), *Turizam i sport-razvojni aspekti*, Školska knjiga, Zagreb.
5. Čavlek, N., (1997), Svjetsko turističko tržište-trendovi (1950.-1996.) i perspektive, *Acta turistica* 16(2).
6. Čavlek, N., Bartoluci, M., Prebežac, D., Kesar, O., (2011), *Turizam-ekonomske osnove i organizacijski sustav*, Školska knjiga, Zagreb.
7. Krapr. K., (1963), *Turizam kao faktor u ekonomskom razvoju*, Konferencija UN 1963, Rim.
8. Krešić, D., (2007), *Acta Turistica*, Vol 19, No.I.
9. Shaw, G., Williams, A.M., (2004), *Tourism and tourism spaces*, Sage publications, London.
10. Svetlačić, R., (1995), *Marketing aspekti turističkog gospodarstva*, master thesis., HF Opatija.
11. Pirjavec, B., (1998), *Ekonomska obilježja turizma*, Golden marketing, Zagreb.
12. Vukonić, B., Čavlek (2001), *Riječnik turizma*, Masmedia, Zagreb.

## USE OF BUSINESS INFORMATION SYSTEMS IN CROATIAN COMPANIES

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### ABSTRACT

*Today, business information systems are undoubtedly essential for the successful existence of every company. Over the years, business information systems have evolved from separate and disjointed information systems to the solutions that integrate the entire business activity of companies known by the acronym ERP systems. Furthermore, thanks to the development of technologies today we can talk about business solutions based on the use of mobile technologies and Cloud Computing (Cloud ERP systems). The goal of this research is to obtain an actual state of application of business information systems in Croatian companies, in order to determine potential areas for improvement and identifying ways of raising the level of using information systems in the ways of doing their business. The study is based on data collected through an online survey conducted among Croatian companies, with responses from total of 72 companies being collected. After analyzing the survey results, it is found that there are still a significant number of companies with separate information systems (legacy systems) that only partially support business functions and are not integrated with other parts of business. This state of affairs leaves plenty of possibilities to improve business by introducing comprehensive and integrated information systems (ERP system). With regard to technological developments in Cloud Computing and Software as a service (SaaS) licensing models a Cloud ERP systems are imposed as possible solution. However, survey results do suggest low interest for Cloud ERP systems.*

**Keywords:** *Application of business information systems, Business information systems, Cloud ERP systems, ERP systems*

### 1. INTRODUCTION

Business information systems are nowadays essential for the successful existence of every organization. Enterprise resource planning (ERP) system provides an integrated view of core business processes and can share data across various departments of the organization. Today, ERP systems are vital tools for an organization. It typically includes an integrated system with a common database and a consistent graphical user interface. Furthermore, thanks to the development of technologies today we can talk about business solutions based on the use of mobile technologies and cloud computing (cloud ERP systems). There are some papers regarding use of business information systems and ERP in Croatia, but there is yet no comprehensive research on current state of the art in Croatian companies. The main aim of our paper is to describe the current use of business information systems in Croatian companies. For this purpose, we have defined three main research questions: What kind of business information systems are commonly used in Croatian companies? What business functions are usually

supported by the information system? To what extent are companies satisfied with their business information system with respect to the provided features? In order to get answers to the mentioned research questions, we have developed an online questionnaire and sent it to the obtained Croatian companies' contacts via e-mail. We hope that our research will advance knowledge on current use of various types of business information systems in Croatia.

This paper proceeds as follows. First, in Section 2, the related work is listed. In Section 3 we describe the used research method. Section 4 shows results of the online questionnaire, together with its discussion. Our conclusions are provided in the final section.

## 2. RELATED WORK

There are numerous articles about use of business information systems and enterprise resource planning (ERP) in companies, their critical implementation factors, business impacts, adoption process, evaluation, and maturity models. Umble et al. (2003) identify success factors, software selection steps, and critical implementation procedures. They have listed the following critical factors for ERP implementation: clear understanding of strategic goals, commitment by top management, excellent project management, a great implementation team, data accuracy, extensive education and training, focused performance measures, and multi-site issues. They have also presented a case study of a largely successful ERP implementation at Huck International Inc., together with its key factors. Al-Mashari et al. (2003) proposed a novel taxonomy of the critical success factors in ERP implementation process. It is based on comprehensive analysis of ERP literature. Ngai et al. (2008) present a literature review of the critical success factors in the implementation of ERP systems across 10 different countries. They have identified 18 critical factors with more than 80 sub-factors, among which top management support and training and education are the most frequently cited.

Olhager and Selldin (2003) present a survey of ERP implementation in Swedish manufacturing firms, concerned with ERP system penetration, the pre-implementation process, implementation experience, ERP system configuration, benefits, and future directions. Holland and Light (2001) present a maturity model for ERP systems that is illustrated using case data selected from the study which is based on 24 organizations in the US and Europe. They have defined three main maturity stages (Olhager and Selldin, 2003) : stage 1 (organizations are managing legacy systems and starting the ERP project); stage 2 (implementation is complete and the functionality of the ERP system is being exploited across the organization); stage 3 (organizations have normalized the ERP system into the organization and are engaged in the process of obtaining strategic value from the system). Sun et al. (2005) propose a structured approach for small manufacturing enterprises to identify the key requirements and measurements of their ERP implementation. Wang et al. (2008) conclude that the fit between the system and the business processes is critical to successful ERP implementation. Their survey data of CIOs in Taiwan confirm that ERP knowledge transfer process leads to a better fit between ERP systems and organizational processes. Mijač et al. (2013) present a literature review performed in order to give an overview of cloud ERP customization. They conclude that the customization of cloud ERP systems is an important issue and represents greater challenge than traditional ERP system. Rothenberger and Srite (2009) investigated why certain ERP system adopters have pursued high levels of software customization during ERP implementations. Their results suggest that high customization may occur because of: unnecessary redevelopment of functionality that is already available, resistance to change, insufficient importance given to the implementation team's recommendations, and the implementation team's lack of opposition to customization requirements (Rothenberger and Srite, 2009).

Kwak et al. (2012) show that managerial practices and socioenvironmental factor are significantly related to the original variables of technology acceptance model in the context of



ERP system. One of the interesting findings is the negative effect of consultant support on perceived usefulness, but positive effect on the perceived ease of use (Kwak et al., 2012). Chen et al. (2009) use a case study approach to examine how poor project management can imperil the implementation of an ERP system. Luo and Strong (2004) proposed a framework for supporting management decision-making about customization choices and the accompanying capabilities. Saini et al. (2014) analyze the possibility of adapting cloud ERP in SMEs. They have compared the average annual cost per user of using ERP in traditional and cloud manner. Laukkanen et al. (2005) investigated the relationship of enterprise size to the ERP adoption. "The survey data based on the responses of 44 companies indicates that significant differences exist between small, medium-sized and large enterprises in ERP system adoption" (Laukkanen et al., 2005).

Below we list some papers regarding use of business information systems and ERP in Croatia. Bosilj-Vukšić and Spremić (2005) present the results of research conducted on reengineering business processes in Croatian companies, together with the results of analysis of the status and characteristics of ERP systems in Croatian companies. They also showed case study of BPR and SAP implementation in Croatian pharmaceutical company Pliva. Kalpic and Fertalj (2004) present the results of an investigation performed in 2001 to conduct the comparative analysis of domestic and foreign ERP software, which is present in Croatia. System evaluation was performed at the users' sites, having insight to real applications. To increase the objectivity and accuracy, the evaluating teams consisted of persons of different profile.

### 3. RESEARCH METHOD

This research aims to reveal the current state of using business information systems in Croatian companies. This will be achieved by answering to following research questions:

1. What kind of business information systems are commonly used in Croatian companies?
2. What business functions are usually supported by the information system?
3. To what extent are companies satisfied with their business information system with respect to the provided features?

In order to obtain relevant data, Croatian companies were contacted by email and asked to participate in an online questionnaire. Contact details of companies have been extracted from BizNet – the register of Croatian business entities. Only companies from register which were characterized as medium in size were taken into consideration. In order to cover different types of companies, with different business activities and in different administrative and geographical parts of Croatia, no other constraints were specified. The search resulted in total of 1277 companies extracted from register. We also promoted our survey on Dignet Days 2015 technical conference and encouraged visitors to participate. The companies were then by email asked to participate in an online questionnaire, and given 10 days to fill in their responses. In this phase, we had received responses from 40 companies. After that all companies were again sent an email with a reminder, and this resulted in additional 32 responses. Total of 72 responses were received for a response rate of 5,6%.

The questionnaire was divided into two sections. The first section contained questions for profiling organization and the respondents (company's primary business activity, number of employees, and the respondent position in company). The section two contained questions aimed to reveal the current state of using business information systems in Croatian companies. Here the companies were asked to specify which type of business information system they use, did they purchase some of the existing solutions (Croatian or foreign) or did they developed new one, which business functions they have supported by information system, and to what extent are they satisfied with their solution. Descriptive statistics has then been used to process collected data and to show the state of business information systems use.

#### 4. RESULTS AND DISCUSSION

According to research questions, this section presents the results of conducted research. Results can be seen through 4 perspectives.

##### *Profile of organization and respondent:*

Respondent companies represented a diverse sample of industries and sizes. Most responses, approximately 25%, were obtained by companies which core business is *manufacturing*. Of the remaining respondents 22,2% choose *Other*, 18,1% are in *Service* sector, 13,9% are dealing with *Sales*, 12,5% are in *State and public* sectors, 4,2% are in *Finance* business, 2,8% are in *Telecommunication* and finally 1,4% are in *Non-profit* sector. According to size of organization, 51,5% of answers were from middle size companies with 50 to 250 employees, 25% small companies up to 50 employees and 23,5% from big companies with more than 250 employees.

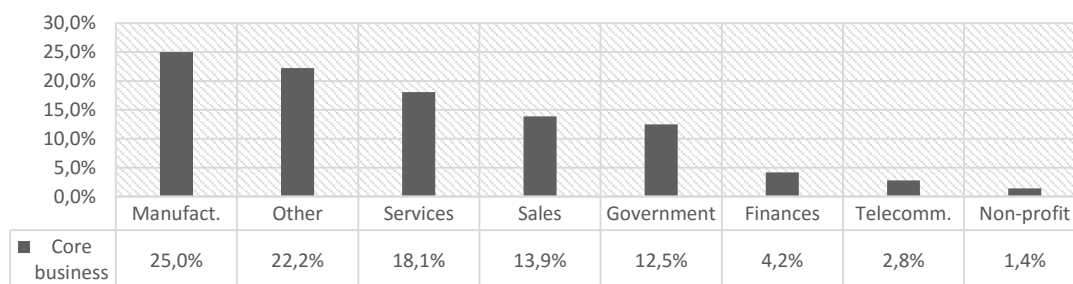


Figure 1 Companies distributed according to core business

When looking at the position of respondents in the organization who participated in the survey, three roles are dominant: *Head of department* 40,3%, *Employee* (end user) 25% and *Director* 23,6%. Other answers were *Project Manager* and *Other* with the same percentage 5,6%. Surprisingly, a large proportion (23%) of companies is not classified into any of defined categories. The focus is in small and medium companies because more than two-thirds (76,5%) responses were from them; what was the goal of the research. Large portion of respondents (63,9%) are decision makers and that fact makes these results more valuable.

##### *Current state of using business information system*

This group of questions aims at finding out which types of business information system were used by Croatian companies, which ones are the most common and how they were obtained. Among the respondents, 61,1% (54,2+6,9%) have ERP system which is a good indication that the companies recognized the importance of the applying integrated and comprehensive business information system as a base of doing business successfully in the current conditions on the market. This answer corresponds to the world 2015 ERP report (Panorama Consulting Solutions, 2015) where 56% of companies implemented on premise information system. So the Croatian companies are similar to the world average. When analyzing the other two answers, the picture is a little different. Very large number of surveyed companies (44,4%=37,5+6,9) still have separate information subsystems for their business functions and even more surprising is the fact that only small percentage of them (1,4%) have Cloud ERP.

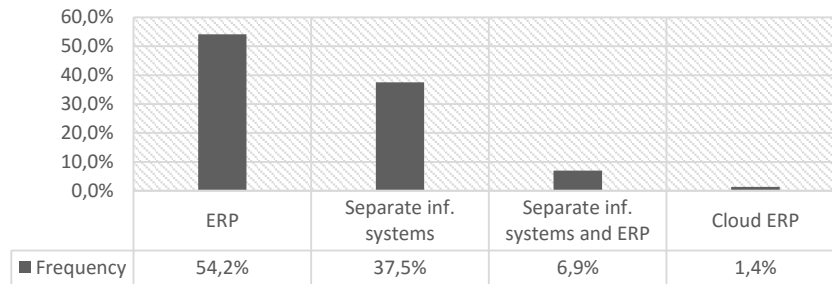


Figure 2 Types of business information systems in companies

Here we can find some correlation. Companies which already have ERP system still use some aspects of separate information subsystems (as legacy systems) what is irreconcilable with the idea of ERP system (one information system for all aspects of business). Reason for that is much deeper (e.g. It is much simpler to get interface for ERP system and separate information subsystems, because it works well, than buying or developing that functionality in ERP system. It also raises money and time consuming issue).

Furthermore, while the world market is focusing on Cloud ERP systems and grows, Croatian companies are lagging behind. The reasons for this should be investigated.

During the years, many business information systems were developed, the market consists of a set of different information systems developed by world known vendors, open source solution, and national IT companies which offer their solutions. According to survey results, 69,4% of Croatian companies bought their business information system(s), of which 47,2% were bought from national vendors and 22,2% were from world known vendors. Only 27,8% information systems were acquired through its own development, and one very small part (2,8%) of information systems are open source solution. It is a pity that Croatian companies do not recognize the quality of national solutions, because according to VIDI.biz (VIDI.biz, 2009) their functionalities are not worse than those of the world known vendors.

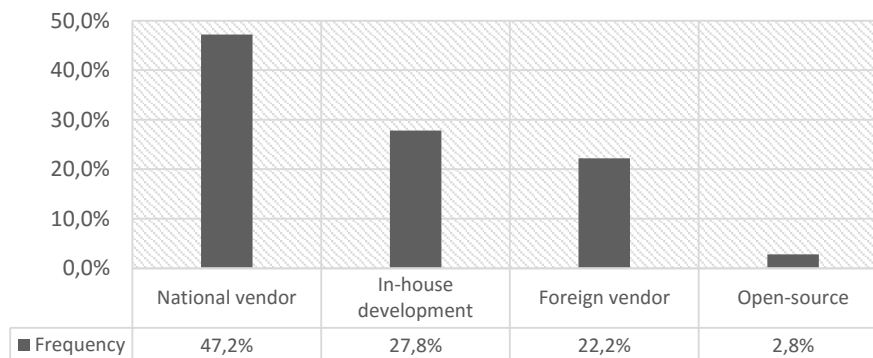


Figure 3 The way of acquiring information system

It is a surprising fact that open source solution are not accepted and by the opinion of authors reasons for that could be lack of functionality or customization issues. This segment leaves a lot of space for improvement and progress can be expected in future. Research shows that there is no single dominant business information system. In the companies that buy business information systems from world known vendors, the most common solutions are: SAP (29%), MS Dynamics NAV (21%), MS Dynamics AX (14%), Oracle EBS (7%), Infor LN (7%) and Others (21%).

In the companies that buy business information systems from national vendors, the most common solutions are: Maris (33), WinTask (28%), Pantheon (11%), S.U.P.E.R. (6%), IPS - Jadran Informatika (6%) and Others (17%).

### *Support of individual business functions by business information system*

The goal of this part of the research was to identify which of the common business functions are present in observed companies, and which of them are supported by business information system. Since respondent companies differ in size, type, line of work and other aspects, not all listed business functions were found in all companies. As can be seen from the *Figure 4*, Finances have been the most frequent business process being present in 97% of the companies, which is by no means surprising result considering the fact that Finances are a support process and that Croatia's legal framework dictates management of finances. Sales and Purchasing as fundamental business functions follow, also being present in over 90% of companies, while conversely, only 54% of the respondents stated to have Manufacturing process in their company. We believe this to be simply a reflection of the current state of Croatia's economy.



*Figure 4 Business functions present in companies*

Over 62% of respondents stated that all of the listed business functions present in their company are supported by business information system, while 37,50% stated at least one business function not being supported (more precisely: one function – 16,67%, two functions 11,11%, four functions 9,72%). *Figure 5* shows that again Finances lead the group of business functions which are most frequently supported by business information system. Interestingly, all respondents who stated Finances business process to be present in their company also stated they have it supported in some way with business information system. Functions for managing warehouse and sales follow with being supported in more than 90% of the companies. Functions other than CRM (supported in only 61% of the companies) are also supported by business information systems in large number of cases (over 80% of the companies).



*Figure 5 Business functions supported by business information system*

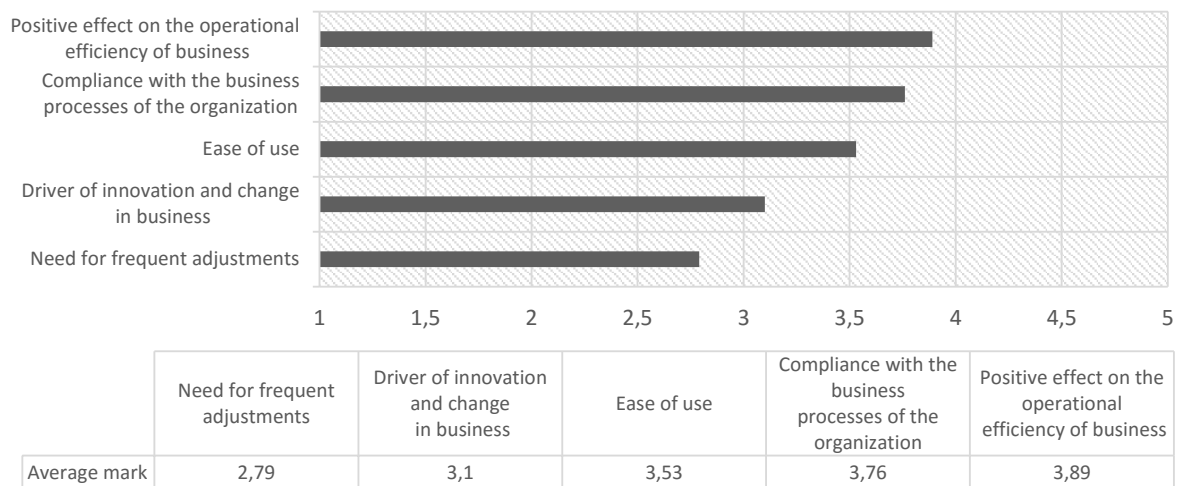
Exactly 10% of respondents which bought ERP systems (national and foreign vendors), beside ERP have some other type of information (sub) system.

### ***Satisfaction with business information system***

Since user satisfaction is a subjective characteristic, we try to get real picture of respondents' satisfaction from five aspects letting them mark each aspect with mark 1 to 5. Evaluated aspects were:

- *Compliance with the business functions of the organization.*
- *Positive effect on the operational efficiency of business*
- *Driver of innovation and change in business*
- *Need for frequent adjustments*
- *Ease of use*

The result shows positive view on business information systems. Higher marks have aspects *Positive effect on the operational efficiency of business* and *Compliance with the business functions of the organization* showing that today's information systems are appropriate for way of doing business and that company recognized the value of implementing information system in business. By the author's opinion, average mark of 3.1 for aspect *Driver of innovation and change in business* is also a good indicator, showing that change and adjustments driven by innovation are not managed only in business but also in information systems which supports it.



*Figure 6 Visual representation of satisfaction aspects*

While good marks about previous aspects are very good news for Croatian businesses, aspect *Ease of use* surprised us with too small average mark – only 3,53. We can assume that, this indicates complexity of today's information systems, which can be justified that in information systems implemented requirements are followed by business's needs. Expectedly, lowest mark was given to aspect *Need for frequent adjustments* showing that any adjustment or change is very stressful for every stakeholder of business.

We can conclude that aspects *Positive effect on the operational efficiency of business* and *Driver of innovation and change in business* are inversely proportional to aspects *Ease of use* and *Need for frequent adjustments*. If information system is more aligned with the business functions of the organization and gives more operational efficiency, it is more complex and requires more frequent or complex changes. Overall, this segment of research shows a good perception of satisfaction level in using business information systems for supporting business.

## 5. CONCLUSION

Business information systems provide essential support for companies on both operative and strategic levels. Over the years they have evolved from separate information systems to today's comprehensive ERP solutions hosted in cloud and offered with flexible software-as-a-service licenses. While companies worldwide eagerly accept emerging technologies and concepts, the question arises about the situation in Croatian companies. Results of this research show that more than half of the companies which use some kind of business information system recognized the advantages of comprehensive and fully integrated ERP systems. However, this still leaves plenty of room for improvement because almost 40% of the companies stated they use separate information system/s. It is also evident that Cloud ERP systems did not manage to significantly penetrate into Croatian companies, so traditional on-premises solutions maintain their ongoing dominance.

When it comes to acquiring business information systems, majority of companies (almost half of them) put their trust in local national vendors and in-house development, while buying solutions from foreign vendors is less present option. One can speculate the reasons behind this. Croatian companies are apparently even more skeptical towards open-source solutions as they are the choice of less than 3% of companies. When taking a look at how individual business functions are supported by information systems we can again see plenty of room for improvement. Almost 40% of companies do not have all business functions supported by information system.

By inquiring the satisfaction of companies with their business information system it was revealed that companies are fairly satisfied with their solutions. They believe their solution is in compliance with their business functions, and that it positively affects their business activities. On the other hand they are the least satisfied with the need for frequent adjustments. In this paper we identified several areas for improvement in using business information systems in Croatia. This is especially true for shifting from legacy systems towards integrated ERP systems, utilizing Cloud technologies and open-source solutions, and supporting currently not supported business functions.

One of the possible interesting topics and future research is to investigate the reasons for such poor acceptance of Cloud ERP and Open source solutions.

## LITERATURE

1. Al-Mashari, M., Al-Mudimigh, A., Zairi, M., 2003. Enterprise resource planning: A taxonomy of critical factors. *Eur. J. Oper. Res.* 146, 352–364. doi:10.1016/S0377-2217(02)00554-4
2. Bosilj-Vukšić, V., Spremić, M., 2005. ERP System Implementation and Business Process Change: Case Study of a Pharmaceutical Company. *J. Comput. Inf. Technol.* 13, 11. doi:10.2498/cit.2005.01.02
3. Chen, C.C., Law, C., Yang, S.C., 2009. Managing ERP Implementation Failure: A Project Management Perspective. *IEEE Trans. Eng. Manag.* 56, 157–170. doi:10.1109/TEM.2008.2009802
4. Fertilj, K., Kalpic, D., 2004. ERP Software Evaluation and Comparative Analysis. *J. Comput. Inf. Technol.* 12, 195. doi:10.2498/cit.2004.03.02
5. Holland, C.P., Light, B., 2001. A stage maturity model for enterprise resource planning systems use. *ACM SIGMIS Database* 32, 34. doi:10.1145/506732.506737
6. Kwak, Y.H., Park, J., Chung, B.Y., Ghosh, S., 2012. Understanding End-Users' Acceptance of Enterprise Resource Planning (ERP) System in Project-Based Sectors. *IEEE Trans. Eng. Manag.* 59, 266–277. doi:10.1109/TEM.2011.2111456
7. Laukkanen, S., Sarpola, S., Hallikainen, P., 2005. ERP System Adoption - Does the Size Matter?, in: *Proceedings of the 38th Annual Hawaii International Conference on System*

- Sciences. Presented at the The 38th Annual Hawaii International Conference on System Sciences, IEEE, Hawaii, p. 226b–226b. doi:10.1109/HICSS.2005.245
8. Luo, W., Strong, D., 2004. A Framework for Evaluating ERP Implementation Choices. *IEEE Trans. Eng. Manag.* 51, 322–333. doi:10.1109/TEM.2004.830862
  9. Mijač, M., Picek, R., Stapić, Z., 2013. Cloud ERP System Customization Challenges, in: *Proceedings of Central European Conference on Information and Intelligent Systems*. Presented at the Central European Conference on Information and Intelligent Systems, FOI, Varaždin, pp. 132–140.
  10. Ngai, E.W.T., Law, C.C.H., Wat, F.K.T., 2008. Examining the critical success factors in the adoption of enterprise resource planning. *Comput. Ind.* 59, 548–564. doi:10.1016/j.compind.2007.12.001
  11. Olhager, J., Selldin, E., 2003. Enterprise resource planning survey of Swedish manufacturing firms. *Eur. J. Oper. Res.* 146, 365–373. doi:10.1016/S0377-2217(02)00555-6
  12. Panorama Consulting Solutions, 2015. 2015 ERP Report (Research Report). Panorama Consulting Solutions, Denver.
  13. Rothenberger, M.A., Srite, M., 2009. An Investigation of Customization in ERP System Implementations. *IEEE Trans. Eng. Manag.* 56, 663–676. doi:10.1109/TEM.2009.2028319
  14. Saini, I., Khanna, A., Peddoju, S.K., 2014. Cloud and traditional ERP systems in small and medium enterprises, in: *2014 International Conference on Information Systems and Computer Networks (ISCON)*. Presented at the 2014 International Conference on Information Systems and Computer Networks (ISCON), IEEE, Mathura, pp. 138–141. doi:10.1109/ICISCON.2014.6965234
  15. Sun, A.Y.T., Yazdani, A., Overend, J.D., 2005. Achievement assessment for enterprise resource planning (ERP) system implementations based on critical success factors (CSFs). *Int. J. Prod. Econ.* 98, 189–203. doi:10.1016/j.ijpe.2004.05.013
  16. Umble, E.J., Haft, R.R., Umble, M.M., 2003. Enterprise resource planning: Implementation procedures and critical success factors. *Eur. J. Oper. Res.* 146, 241–257. doi:10.1016/S0377-2217(02)00547-7
  17. VIDI.biz, 2009. ERP sustavi domaćih tvrtki [WWW Document]. URL <http://arhiva.vidilab.com/vidi.biz/arhiva/vidi.biz02/pdf/Vidi.biz.pdf> (accessed 11.20.15).
  18. Wang, L., von Laszewski, G., Kunze, M., Tao, J., 2008. Cloud computing: A Perspective study, in: *Proceedings of the Grid Computing Environments (GCE) Workshop*. Presented at the Grid Computing Environments (GCE) workshop, Austin, Texas.

## **EFFECT OF CORPORATE GOVERNANCE INDEX ON DIVIDEND POLICY: AN INVESTIGATION OF TEXTILE INDUSTRY OF PAKISTAN**

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### **ABSTRACT**

*This study observed empirically the impact of corporate governance index on dividend payout policy by using the data of seventeen textile firms listed in Karachi Stock Exchange. The data covered the five years period from 2009 to 2013. The data were gathered from financial statements of all the sample firms. Multiple regression models were used to check the impact of corporate governance on dividend policy. No effect of corporate governance index on firm dividend policy was found, and the largest shareholders also had no impact on dividend payout policy. The association between payout policy and stock value was found to be significant positive. Gross profit margin and operating profit margin had significant positive impact on firm's dividend payout policy. There is a significant correlation between firm performance and payout policy.*

**Keywords:** *Corporate Governance index, Dividend Policy, Textile Industry, Largest Shareholders, Multiple Regression Model*

### **1. INTRODUCTION**

The meaning of Corporate is a larger entity that is fall apart, and different from its owners. Corporation has a right to enter into contracts, take money from people to invest or lend money to people, it can take legal action against companies or it can be sued by someone. It pays taxes and also owns some assets. Corporations Governance means formation of policies, and constant monitoring of their proper performance, by the members of the administration of an organization. It includes the tools compulsory for balance of the power of the members and their primary duty of enhancing the prosperity and possibility of the organization. Corporate Governance means the layout of policies and some regulations through which accountability and purity in the relationships with the stakeholders of the company is protected by the board



of directors, Payout Policy refers the policy which a company uses to find out that how much company will pay to the shareholders of company.

Dividend payout policy is much important in the company's procedure of valuation, but the issue is still there hardly inquiring in changeover countries. Dividend policy is about the decision of dividing the net income of the company between dividends to shareholders and retained earnings. The subject of corporate governance is one of the issues that have attracted the attention of researches and organizations around the world. The development of agency theory and the associated agency problem caused by the difference of opinion among management and shareholders led to the need for a set of rules, regulations and standards that work to save the interest of shareholders. Therefore the corporate governance aims to encourage investment by maintaining the rights and interest of all involved parties and, as a result, received the attention of many international, regional, and local organizations. Firms those are more able to maintain stable dividend payments are those which are able to finance their growth opportunities. Thus, knowing whether differences in dividend policy across firms can be explained by difference in their corporate mechanism will help to find out that how the corporate governance appliance can be efficient.

On agency theory, Jensen (1986) indicates that if good investment chances are missing then companies can relieve issues among the outsiders and insiders stakeholders, means the shareholders use this method to manage the discipline. Zwiebel (1996) and Easterbrook (1984) claimed the same thing that managers power can be minimize through the dividend payouts. Rozeff (1982) examined that agency problems can be minimized by high level of dividend payouts, as well as it can be helpful in increasing the outside financing but at a lower stage. Faccio et al. (2001) provides the proof that dividends can be used by the shareholders as a tool to acquire funds from outside shareholders. They advise that payout policies can minimize the misuse of the funds of minority shareholders.

Chae et al. (2009) use US data and show that the companies who have high outside financing restrain move to the decreasing the payout ratio when they have the chance of improvement in the Corporate Governance. Almeida et al. (2011) suggest that companies having good corporate governance have the high firm value and better payout policy than the companies who have bad corporate governance. Research shows that the companies having good corporate governance face very rarely the cost of taking loan and at a very low cost. Bhojraj and Sengupta (2003) examined that the companies with the greatest level of organizational ownership and also strong outside board control gain the higher ratings when they issue new bonds in the market. Bae et al. (2012) examined that the shareholders who control the business have good and strong benefits to change the company's funds into their own funds.

### **1.1. Problem Statement**

Corporate governance focused here to check the impact of CG on dividend policy. How the corporate governance will affect the dividend payout policy in textile firms? When a company made policies about dividend the question arise how leverage and CGI do effect on making the decision of dividend policy? How could largest shareholders have the impact on the distribution of divided among the shareholders, and how can we calculate dividends by leverage, profitability and firm size? The firm decides their dividends payout ratio after paying all expenditures and tax. Domestic investors always prefer to work as a director rather than work as an ordinary shareholder. They always give first preference to open new company rather than investing their funds in their existing company. The salaries of the directors are greater than the other employees of same qualification and experience. Insiders of company get many benefits from which two or more important, one is that they get executive compensation and second one is that they maintain their control on the firm.

## 1.2. Research Objective

The purpose of this study is to ascertain the connection among corporate governance variables and dividend payout of textile mills in Pakistan. The objective of the research is to build a relationship in corporate governance, profitability, and leverage and payout policy among textile firms in Pakistan.

## 1.3. Organization of the Study

The remaining portion of the study is divided as: section two is the literature review and the section three is the data and research methodology. Section four consists of results and section five includes the conclusion of the study.

## 2. LITERATURE REVIEW AND HYPOTHESIS

A decision about the dividend payout is one of the most important financial decisions for every business organization. Corporate governance can affect the dividend payout decision. There is a controversy about the relationship of corporate governance and dividend payout. L.s.hwang.et al, (2013) said that corporate governance practice in a positive way, but in dependent firms the stakeholders could not get their rights because their rights become weaker. Corporate governance enhanced the payout policy ratio. They said that corporate governance has a positive impact on independent firms. In that firms the rights of stakeholders become stronger and they got their rights easily. The OLS regression model was used which shows that corporate governance had a statistical positive effect on payout ratio. H. Zhang (2008) examined the effect of corporate governance on dividend policy. He described that Chinese listed company's pays low dividend to shareholders. They examined that there is negative relationship between board structure and dividend rate.

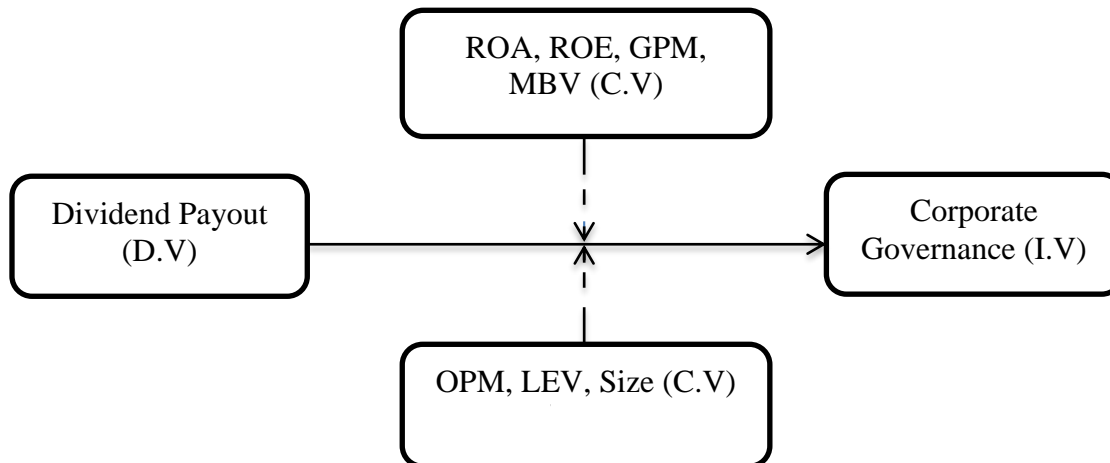
J.F Abreu , M. A. Gulam Hussen (2013) compared the dividend payout with before financial crisis, during, and after the financial crisis. They examined that the impact of size and profitability on dividend payout was positive before, during and after the crisis. F.lefort and E. Walker March (2005) examined the relationship between corporate governance and market valuation. They found a constructive connection among corporate governance, dividend payout and firm performance.

M.A.Halim and A.Bino investigated the link among dividend policy and corporate governance which is calculated by ownership structure. A significant negative connection among dividend payout ratio and the percentage of capital owned by block holders was found. K.Gugler and B.Burcin Yurtoglu (2002) analyzed the dividend change announcements in Germany during a specific time period. They found that dividends signal the harshness of the issue among the large, controlling, small owners and outside shareholders. Change dividend announcement give new information about the issue. They use information on the ownership and control structure of the firm to check the rent extraction hypothesis and separate it from the cash flow. They found that there was a significant negative impact of wealth in order of two percentage points for firms.

Bill B.Francis et al (2011) worked on managers strongly prefer on cash retention or repurchasing the stock instead preferring the payment of dividends. Agency problems between corporate insiders and outsiders shareholders have an impact on dividend payout policy. Managers prefer not to pay dividends or to cut down the dividends .Firms who pay high dividend have the strong business level. Allen Michael (1979) examines that the important untouched issue in corporate finance is the relationship among firm valuation and dividend payout policy.

***Hypothesis 1: Corporate Governance has a significant impact on Payout Policy.***

## 2.1. Theoretical Framework



In the above theoretical framework, the Dividend Payout is the dependent variable influencing the independent variable Corporate Governance. ROA, ROE, GPM, OPM, LEV, MBV and Size are the control variables.

## 3. Data and Methodology

The data ranging from the period of 2009-2013 of seventeen textiles firms listed in Karachi Stock Exchange (KSE) of Pakistan are used in this study. The data consists of annual financial reports published by the Pakistani firms. The dependent variable is dividend policy and the independent variable is corporate governance. The study also employs seven controlling variables defined in Table 1. Regression model is used to analyze the effect of corporate governance on payout policy.

Table 1: Variable Description

Category	Variable Name	Description
<b>Dependent</b>	Dividend Payout (DPS)	Cash Dividend / Sales
<b>Independent</b>	a. Corporate Governance Index (CGI) b. Largest Shareholders (LS)	a. The sum of shareholder rights, board, disclosure, audit, and payout indices b. Percentage share ownership by largest shareholder
<b>Controlling</b>	a. Operating Profit Margin (OPM) b. Gross Profit Margin (GPM) c. Return on Assets (ROA) d. Return on Equity (ROE) e. Leverage (LEV) f. Stock Value (MBV) g. Size of Firm (LTA)	a. Operating Profit / Net Sales b. Gross Profit / Net Sales c. Net Income / Total Assets d. Net Income / Shareholder Investment e. Total Debts / Total Assets f. Market Value of Common Stock / Book Value of Common Stock g. Logarithm of Total Assets

Note: This table provides a brief description of all the variables used in this study.

### 3.1. Model

$$DPS_{it} = \beta_0 + \beta_1 CGI_{it} + \beta_2 LS_{it} + \beta_3 LEV_{it} + \beta_4 ROA_{it} + \beta_5 ROE_{it} + \beta_6 OPM_{it} + \beta_7 GPM_{it} + \beta_8 MBV_{it} + \beta_9 Size_{it} + \varepsilon_{it} \dots\dots\dots(1)$$

Where; DPS is cash dividend divided by sales and CGI is the corporate governance index which is the sum of audit, disclosure, board, payout indices and shareholder rights. LS is largest shareholders, LEV is leverage, ROA is return on assets, ROE is return on equity, OPM is operating profit margin, GPM is gross profit margin, MBV is market value of common stock divided by book value of common stock and Size is the logarithm of total assets.

## 4. EMPIRICAL RESULTS AND DISCUSSION

In this section the study has explained the descriptive statistics, Pearson correlation and regression results to analyze the effect of corporate governance on payout policy.

### 4.1. Descriptive Statistics

Table 2 provides the descriptive statistics results of textile firms listed in Karachi Stock Exchange of Pakistan. The mean value of corporate governance index (the sum of corporate governance variables) is 0.8606 with the maximum value of 1.00 and minimum value of 0.50 for all the sample firms. The maximum CGI value shows the firms with best practice in corporate governance and minimum value of CGI indicates the firms with worst practice of corporate governance. The mean value of DPS and LS is 0.3970 and 6.7349 respectively. The maximum and minimum value of ROA is 0.61 and -0.21 respectively having mean value of 0.0695. The maximum value of ROA shows the firms with good financial performance. The mean value of GPM is 0.1222 and OPM is 0.1158. The mean value of MBV is 3.0682 with the maximum value of 6.1616 and minimum value of 0.010. The minimum and maximum value of LEV is 0.10 and 7.03 with mean value of 0.7188. The LS has the maximum value of standard deviation (5.3481). The mean value of ROE is 0.4580 with the minimum and maximum value of -0.22 and 3.00 respectively.

Table 2: Descriptive Statistics

Variable	Minimum	Maximum	Mean	Std. Deviation
DPS	0.00	4.00	0.3970	0.8365
GPM	-0.32	0.75	0.1222	0.1333
OPM	-0.06	0.78	0.1158	0.1399
ROA	-0.21	0.61	0.0695	0.1448
ROE	-0.22	3.00	0.4580	0.6118
LS	0.17	4.279	6.7349	5.3481
MBV	0.01	6.161	3.0682	1.1390
CGI	0.50	1.00	0.8606	0.1382
LTA	8.54	10.91	9.5551	0.5637
LEV	0.10	7.03	0.7188	0.8328

### 4.2. Pearson Correlation

Table 3 shows the Pearson correlation among all the variables. The highest correlation is in between the MBV and DPS which is significant at the 0.01 level of significance. ROE has significant association with ROA at the significance level of 0.01. The CGI has significant correlation with ROA and OPM at 0.05 levels. Firm size has significant negative correlation with DPS and MBV and positive correlation with CGI.

Table 3: Pearson's Correlation Matrix

	DPS	GPM	OPM	ROA	ROE	LS	MBV	CGI	LTA	LEV
<b>DPS</b>	1.000									
<b>GPM</b>	0.231	1.000								
<b>OPM</b>	0.127	-0.080	1.000							
<b>ROA</b>	-0.127	0.190	-0.173	1.000						
<b>ROE</b>	0.077	0.002	0.086	0.829**	1.000					
<b>LS</b>	-0.023	0.025	0.014	-0.008	-0.051	1.000				
<b>MBV</b>	0.859**	0.091	-0.111	-0.122	0.031	-0.033	1.000			
<b>CGI</b>	0.124	0.177	0.296*	0.258*	0.215	0.082	-0.021	1.000		
<b>LTA</b>	-.393**	-0.192	0.053	0.108	0.149	0.032	-	0.306*	1.000	
<b>LEV</b>	-0.051	-0.232	-0.028	-0.142	-0.100	-0.018	.415**	-0.126	0.165	1.000
							0.015			

Note: \*Correlation is significant at the 0.05 level and \*\*Correlation is significant at the 0.01 level.

#### 4.3. Regression Analysis

In order to move for further analysis, the study has considered the major assumptions which are very important in panel data analysis. Table 4 shows the regression outcomes of all the sample firms.

Table 4: Regression Results

Dependent Variable: Dividend Payout (DPS)			
Variables	Coefficient	t-statistics	p-value
(Constant)		0.584	0.562
<b>CGI</b>	0.112	1.586	0.119
<b>LS</b>	0.002	0.002	0.971
<b>MBV</b>	0.779	10.912	0.000***
<b>LEV</b>	0.000	-0.150	0.986
<b>GPM</b>	0.190	3.048	0.004***
<b>OPM</b>	0.126	1.727	0.090*
<b>ROA</b>	-0.295	-2.131	0.038**
<b>ROE</b>	0.275	2.106	0.040**
<b>LTA</b>	-0.083	-1.166	0.249
<b>R<sup>2</sup></b>	0.400		
<b>F-statistics</b>	30.35		

Note: \*Significant at 0.10; \*\*Significant at 0.05; \*\*\*Significant at 0.01

Table 4 displays in regression model that the stock valuation (MBV) (Coef. = 0.779, t= 10.912) has positive relationship with dividend payout at the significance level of 0.01. The results are consistent with F. Lefort and E. Walker March (2005). There is a positive relationship between gross profit margin (Coef. = 0.190, t= 3.048) and dividend payout at 0.01 level of significance. The interaction between operating profit margin (Coef. = 0.126, t= 1.727) and dividend payout is found to be positive at the level of significance of 0.10. The return on equity (Coef. = 0.275, t= 2.106) has significant positive impact on dividend payout policy, the results are consistent with J.F Abreu , M. A. Gulam Hussen (2013). The return on assets (Coef. = -0.295, t= -2.131) has significant negative impact on dividend payout policy, the results are inconsistent with J.F Abreu , M. A. Gulam Hussen (2013). The firm size has no impact on the dividend payout which is not consistent with J.F Abreu , M. A. Gulam Hussen. Moreover, the corporate governance index, largest shareholder and leverage has no effect on the firms payout policy. The coefficient of determination ( $R^2$ ) is 0.40 and F statistics is 30.35.

## 5. CONCLUSION

This study observed empirically the impact of corporate governance index on dividend payout policy by using the data of seventeen textile firms listed in Karachi Stock Exchange. The data covers the five years period from 2009 to 2013. The data is gathered from financial statements of all the sample firms. Regression analysis is used to check the impact of corporate governance on dividend policy.

Current study mainly focuses on two issues of corporate governance: First is how the legal environment affects corporate governance instruments and the relationship among corporate governance and firm value and second is what are the determinants of corporate governance practices? No effect of corporate governance on firm dividend policy is found, and the largest shareholders also have no impact on dividend payout policy. The association between payout policy and stock value is found to be significant positive. Gross profit margin and operating profit margin have significant positive impact on firm dividend payout policy. There is a significant correlation between firm performance and payout policy. Firm size and leverage has no impact on dividend policy of textile firms. Firms should focus on improving the corporate governance in order to increase the payout policy. Dividend payments reduce the amount of free cash flow available for use at the discretion of corporate insiders, so they help alleviate the exploitation of minority shareholders.

## LITERATURE

1. Abdel-Halim, M. and Bino.A. (2013). Corporate Governance and Dividend Policy: When Investor protection is Weak. (Unpublished paper, 2013) available at [www.ssrn.com](http://www.ssrn.com).
2. Abreu, J. F. and Gulam Hussen, M. A., (2013). Dividend pay-outs: Evidence from U.S bank holding companies in the context of the financial crisis, *Journal of corporate Finance* 22(2013) 54-65
3. Almeida, H., Park, S.Y., Subrahmanyam, M.G., Wolfenzon, D., 2011. The structure and formation of business groups: evidence from Korean chaebols. *Journal of Financial Economics* 99, 447–475.
4. Bae, K., Baek, J., Kang, J., Liu, W., 2012. Do controlling shareholders' expropriation incentives imply a link between corporate governance and firm value? Theory and evidence. *Journal of Financial Economics* 105, 412–435.
5. Bhojraj, S., Sengupta, P., 2003. Effect of corporate governance on bond ratings and yields: the role of institutional investors and outside directors. *Journal of Business* 76, 455–476.
6. Chae, J., Kim, S., Lee, E., 2009. How corporate governance affects payout policy under agency problems and external financing constraints. *Journal of Banking and Finance* 33, 2093–2101.
7. Easterbrook, F., 1984. Two agency-cost explanations of dividends. *American Economic Review* 75, 650–659.
8. Eduardo Walker, F.L. (2005). The Effect of Corporate Governance Practise Company Market Valuation And Payout Policy In Chile. (unpublished paper 2005).
9. Faccio, M., Lang, L.H.P., Young, L., 2001. Dividends and expropriation. *American Economic Review* 91, 54–78.
10. Francis, B. B. and Hassan, I. (2011). Corporate Governance and Dividend Payout Policy: Attest Using Antitakeover Legislation, *Financial Management* spring 2011 pages 83-112
11. Gugler, K. and Yourtoglu, B. B., (2002). Corporate governance and dividend pay-out policy in Germany. *European Economic Review*, 47 (2003) 731 –758
12. Hwang, L. S. and Park, R. S., (2013). Corporate governance and payout policy: Evidence from Korean business group, *Pacific-Basin Finance Journal*, 24(2013) 179-198
13. Jensen, M.C., 1986. Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review* 76, 323–329.

14. Michel, Allen. (1979). Industry Influence on Dividend Policy, financial Management Association 1979
15. Rozeff, M.S., 1982. Growth, beta and agency costs as determinants of dividend payout ratios. *Journal of Financial Research* 5, 249–259.
16. Zhang, H., (2008). Corporate governance and dividend policy: A comparison of Chinese firm listed in Hong Kong in the Mainland, *China Economic Review*, 19 (2008) 437 – 459
17. Zwiebel, J., 1996. Dynamic capital structure under managerial entrenchment. *American Economic Review* 86, 1197–1215.

## DETERMINANTS OF INTRA-INDUSTRY TRADE OF THE NEW MEMBER STATES

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### ABSTRACT

*The paper aims to analyze the determinants of intra-industry trade (IIT = simultaneous export and import of similar goods produced in one industry) of the New Member States (NMS defined as 14 countries accessing the EU in the years 2004 and 2007). In our empirical analysis we use panel data with variables controlling for membership of these countries in the EU. Though the time series contain the years before the EU enlargement, we mainly focus on the period since the EU-Eastern enlargement (2004-2013). We estimate the determinants for EU members and NMS what permits us to find out, whether the changes in trade specialization differ between the old and the new EU members. We expect more intensive IIT as a proof of progress of economic integration of the NMS in the framework of the EU membership. Moreover, we examine additional impact of regionalism on IIT that represents the EU Common Commercial Policy (CCP) impact.*

**Keywords:** intra-industry trade, New Member States

### 1. INTRODUCTION

Intra-industry trade (IIT) defined as simultaneous export and import of similar goods produced in the same industries is an exchange of highly differentiated goods produced by manufacturing sectors well developed especially in industrialized countries. The demand for differentiated goods comes mainly from the same group of industrialized countries since their citizens are relatively wealthy, so their consumption is dominated by normal and luxury goods usually produced in many varieties (on the contrary – inferior goods are often homogeneous and constitute a dominant part of purchases of the poorer consumers). Volume of IIT increases as a result of technological progress. More and more goods (final as well as intermediate) become differentiated (qualitatively or non-qualitatively). Additionally, many goods that were non-tradable in the past become tradable also in respect to IIT<sup>26</sup>.

As IIT symbolizes simultaneous import and export of goods under same product-level classification it can be calculated by the Grubel-Lloyd (*GL*) index as follows:

$$IIT_{R,P,j,t} = 1 - \frac{\sum_R \sum_P \sum_{i \in j} |X_{RPit} - M_{RPit}|}{\sum_R \sum_P \sum_{i \in j} (X_{RPit} + M_{RPit})} \cdot 100$$

where:

R – reporter; P – partner; i – commodity (goods at 8-digit level of CN codes), j – product group.

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<sup>26</sup> This is true for services but trade with them goes beyond the subject covered in this paper.

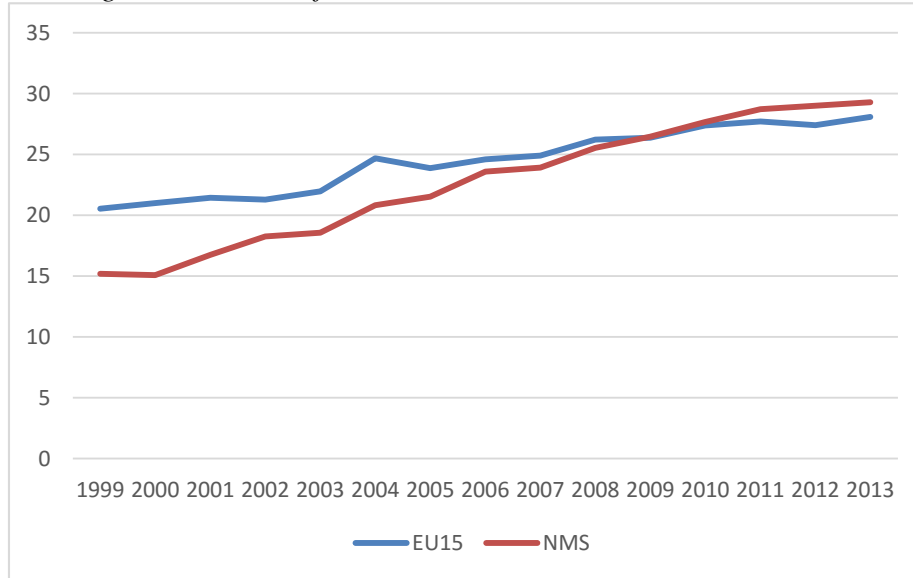


The *GL* index ranges from 0 to 100. Intra-industry trade is a difference between total trade and inter-industry trade<sup>27</sup>. The higher the *GL* index is, the more intensive is the intra-industry trade

(extreme cases: the whole trade is IIT  $\sum_{i=1}^n X_i = \sum_{i=1}^n M_i \Rightarrow IIT = 100$ ; the whole trade is inter-

industrial:  $\sum_{i=1}^n X_i = 0$ , or  $\sum_{i=1}^n M_i = 0 \Rightarrow IIT = 0$ ).

Graph 1. Changes in the level of IIT in trade between NMS and EU15 and among NMS



The significant growth in intra-industry trade (IIT) between the EU15 and NMS (the EU15-line in Graph 1) was observed after 1999. This trend continued after the accession, what indicates a structural change in the nature of NMS trade and their economic adjustment as well as a real convergence to the EU. These processes are accompanied by an increase in varieties domestically produced, better exploitation of increasing returns to scale (IRS) in production, and closing technology gaps against competitors. The recent increase of IIT share symbols creation of manufacturing capacity, expansion of export capability, increased involvement in global production networks, and change in trade pattern.

This paper examines main factors which contribute to growth of IIT after the NMS EU accession. The main goal of the paper is to study the impact of integration in the framework of the EU on this type of trade. This empirical test is important, because, as well known, IIT can be determined by various factors. Some of them are related to the characteristics of trading partners, whereas the others to industries (the detailed analysis of these factors see eg. Czarny (2002)). In empirical analysis some authors refer to the theory of intra-industry trade, whereas the others accept the assumptions that are not based on theory but rather made *ad hoc*. In this paper we analyze the macroeconomic factors influencing intra-industry trade intensity. We provide analysis of main macroeconomic determinants outlining the role of economic integration (based on the observation of NMS IIT).

<sup>27</sup> GL index is primarily calculated in mutual (bilateral) trade of two countries. Than based on GL indexes in bilateral trade we obtain aggregate values of the indexes for groups of trading partners (e.g. for the whole EU). Starting with the calculation of the GL indexes for groups containing more than two partners can result in aggregation error (overestimation of IIT).

## 2. DETERMINANTS OF IIT

We analyze the changing trade pattern of NMS during their adjustment as well as during the time of their EU-membership. The investigation focuses on the increase in NMS intra-industry trade (IIT) with their trading partners from the EU and from the rest of the world.

The earliest IIT theory models emphasized that this type of trade is intensive mainly between countries with similar levels of economic development. That's why IIT is traditionally considered as a phenomenon most intensively occurring between two similar trading partners. Partners with extensive differences in factor endowments, GDP levels and technologies used, are assumed generally to engage in inter-industry trade, which refers to the exchange of commodities differing in characteristics and produced in different industries. This indicates that not only systemic transition, pre-EU accession adjustment processes and accession itself, but catching-up process, convergence of NMS towards income and development levels of the EU15, should generate growth of their IIT as well.

Helpman and Krugman (1985) confirmed that intensity of IIT is determined by relative factor endowment and the size of the two trading economies. In particular, high degree of similarity in factor endowment and a small gap in income levels facilitate the development of intra-industry trade. This similarity can be represented by the small difference in GDP *per capita* of trading partners.

The size of the trading countries measured by the size of their GDP relates to increasing returns to scale (IRS). Larger economies with large industries and big domestic markets can better use IRS occurring domestically what was confirmed by Bergstrand (1990, 1223-1224), Balassa (1886b, 123) and Matthews (1998, 89). The large size of a trading country generally positively affects IIT.

One of the most important factors contributing to the development of intra-industry trade is the existence of a common border between two trading partners. The common border simulates adjacency of countries and is an approximation of low transport costs (see eg. Balassa (1986b, 109 and 123), Clark (1998, 352), Matthews (1998, 89)). With the increase of the distance between the countries, import becomes more expensive and is potentially easier replaced by domestic production or substituted by import from the other countries. It is usually expected that bilateral trade falls sharply as distance increases. Many authors, especially recently, noticed, that the term distance is attributable not only to geography, but e.g. to culture, financial and legal systems as well (more see e.g. Irac, 2006, 14-15; Czarny, Menkes, Śledziwska, 2010).

Intra-industry trade also becomes more intense with the increase of the openness of the economy. The main reason is a big sensitivity of products being (imperfect) substitutes on protection and trade barriers used under this trade policy. International trade naturally intensifies competition on the domestic market and makes domestic products compete with the foreign ones.

Simultaneously, IIT (especially its horizontal form) leads to relatively low (at least lower than vertical IIT and inter-industry trade) adjustment cost. This explains why liberalization of IIT is less politically contentious than Heckscher-Ohlin type of exchange and why the post WWII expansion of trade did not generate much political protest (Krugman, 1981). It visualizes one important aspect of difficulty with North – South relations as compared with the North – North ones.

Inflow of FDI not only boosts export growth, but also helps in the transition of exports from low value-added to high value-added products (Xing 2007). FDI improves production capacities, allows to increase number of product varieties and directly intensifies IIT. This is especially true in the developing and catching-up countries. Empirical evidence supporting the causal relationship between FDI and IIT can be found in Hu and Ma (1999), Zhang et al. (2005), Xing and Zhao (2007).

The pioneering theories of intra-industry trade were developed in relation to the signing of the first regional trade agreements, in particular between countries of the European Economic Community. Most of the early empirical studies found some evidence that regional trade agreements (RTAs) stimulate intra-industry trade (i.e. Grubel and Lloyd 1975, Balassa and Bauwens 1987). Other studies relate to the reduction of tariff and non-tariff barriers as factors positively influencing IIT and present after creation of an RTA. In other words, intra-industry trade may rise as countries gradually open their domestic markets (and allow to import from all partners (as under Most Favoured Nation rule) or from selected partners (as in the framework of a RTA). Many studies (e.g., Balassa, 1986; Falvey, 1981, Bergstrand 1990) showed that the share of intra-industry trade increases with decreasing difference in the level of tariffs.

Bergstrand, Egger and Larch (2010) proved that countries located closer to each other (in terms of physical distance) as well as partners with relatively large GDPs and with similar economic sizes are better candidates to form a RTA or to enlarge an existing one (or to do it sooner). Such countries have higher probability of success than partners that do not share the mentioned characteristics.

Frankel and Wei (1995) found that a pair of EC Member States trades with each other almost 50% more intensive than other similarly-placed countries. The authors confirmed as well 50% fall of variability of bilateral exchange rates among EC – members during the 1980s. However they add, that endogeneity of the currency regime decreases the estimated effect of bilateral exchange rate variability.

Other empirical studies (e.g. Rodas-Martini 1998) show however that the impact of RTAs on IIT is statistically insignificant. They suggest that the removal of trade barriers intensifies competition among local and foreign firms and a relatively less developed countries may not be capable to exploit benefits of the opening towards new markets. Similarly, market opening may induce deeper specialization based on revealed comparative advantages and revive one-way (inter-industry) trade.

We will control for the integration process of NMS in the EU<sup>28</sup>. That's why we use the dummy variable for intra-EU trade. Simultaneously, since after 2004 NMS are the partners in different RTAs in the framework of the EU Common Commercial Policy (CCP), we evaluate not only the EU internal integration process but also discriminatory external trade liberalization with the participation of the EU. We first include the dummy variable RTA (equal to 1 when there is any RTA signed between two trading partners) and than separate dummy variables for free trade agreements (FTA), customs union (CU) and economic integration agreements (EIA)<sup>29</sup>.

### 3. DATA DESCRIPTION AND ESTIMATION RESULTS

We use a gravity approach borrowed by economists from Newtonian mechanics. Although the gravity model is already a commonly accepted and a standard tool to study the trade flows, the specification of the equation for estimation purposes differs according to the approaches of different authors. The most remarkably, Silva and Tenreyro (2006) have raised a problem that has been ignored so far by both the theoretical and applied studies. In particular they argued, that the logarithmic transformation of the original model is not relevant approach to estimate elasticities. Namely, the multiplicative trade models with multiplicative error do not satisfy the assumption of the homoscedasticity of the error term since there is dependency between the

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<sup>28</sup> Though another class of models is aimed at studying the impact of currency blocks on trade of their member states (with pioneering work of Frankel and Wei, 1993). We omit this type of models as only a few NMS joined the European monetary union (Baltic countries, Slovakia and Slovenia) concentrating our attention exclusively on the determinants of NMS IIT.

<sup>29</sup> We are aware of the fact that EIA are never independent RTAs. They accompany a discriminatory liberalization of trade in foods in the framework of FTA or CU. We separately analyze EIA as it becomes more and more important form of discriminatory liberalization of international economic co-operation nowadays.

error term of transformed log-linear model and the regressors, which finally causes inconsistency of the ordinary least squares estimator or the random and fixed effects estimator. As an alternative, authors propose the estimation of the gravity model in levels using the PPML estimator. Besides tackling with the problem of heteroscedasticity of the error term, the estimator deals with the zero value observations in trade flows. Additionally, unlike to the standard Poisson approach, PPML does not require the data to be Poisson type, in other words, that it does not require the dependent variable to be an integer. Finally, PPML allows to identify effects of time invariant factors. In this paper we follow Silva and Tenreyro (2006) who have proposed the Poisson pseudo-maximum-likelihood (PPML).

Variable Name	Description	Source	Expected sign
lnGDP <sub>i</sub>	Natural logarithm of GDP in current US dollars of reporter country (country i) representing the country size variable	WDI	+
lnGDP <sub>j</sub>	Natural logarithm of GDP in current US dollars of partner country (country j) representing the country size variable	WDI	+
lnFDI/GDP	Natural logarithm of the share of FDI in GDP of a partner country	WDI	+
Intrade/GDP	Natural logarithm of openness of the partner's economy measured by the share of trade in goods and services in GDP.	WDI	-
lnGDPpc	Natural logarithm of the absolute value of difference of GDP per capita in purchasing power parity (PPP) of reporter and partner countries as a measure of the impact of factor proportions on bilateral trade	WDI	-
Indistance	Natural logarithm of geographic distance between trading country pairs as a measure of the impact of trade costs.	CEPII	-
contig	Dummy variable indicating that reporter and partner country are neighbors (measure of contiguity)	CEPII	+
EU	Dummy variable indicating that partner country is the EU members		+
RTAs	Dummy variable indicating that reporter and partner countries have signed regional trade agreement (RTA)	WTO	+

Table 1. Variables used in the gravity model

To test the model empirically, we use the data set covering the period from 1988 to 2013. As reporter countries we analyze EU Member States and NMS. Partners are all the countries in the world according to the data availability.

We split the period of analysis into two sub-periods. The first one refers to the years before the accession of 10 New Member States to the EU (we run the equation only for EU15 countries). The second one contains the period 2004-2013 and applies for all EU member states. In Table 2 we present the estimation results.

From the results shown in Table 2 we conclude that our calculations correspond well with the literature. Increase of GDP of both the exporter and the importer in a pair of countries has a *ceteris paribus* positive impact on the IIT share. The distance between the trade partners has a negative impact on the expected IIT level and the dummy for contiguity yields the positive and statistically significant coefficient. The common border and the decreasing distance play the important role in IIT development. The other significant determinant of IIT is the openness of the economy.

Also impact of difference in GDP per capita and the FDI share in GDP impact IIT level although not during the whole analyzed period and not for all countries. Difference in GDP per capita appears not significant as a determinant of NMS IIT (before as well as after the accession) what can be explained by their lower level of welfare and the transition period. FDI share to GDP was not significantly influencing IIT of the EU-countries after 2004.

Dummies representing the integration (intra EU and CCP) that have been introduced should be interpreted as reflecting the *ceteris paribus* difference between the averaged situation of a given pair of countries in terms of their participation in integration (when the two countries participate in the same regional trading agreement) as compared to export in a pair of countries that are not

engaged together in integration process. This integration process is deep (as in the case of European integration) or shallow, concerning only trade liberalization (as regionalism in general).

Estimation results confirm the positive impact of integration process within and with EU countries on IIT level: before and after 2004. Additionally, the impact of regionalism is positive although the coefficient representing the influence of European integration is higher.

*Table 2. Estimation results for IIT of the EU and the NMS in different periods*

	(1) EU	(2) NMS	(3) EU after 2004	(4) NMS after 2004
lnGDPi	0.303*** (74.28)	0.312*** (18.51)	0.272*** (52.40)	0.329*** (17.16)
lnGDPj	0.297*** (51.45)	0.287*** (19.16)	0.310*** (39.13)	0.262*** (14.90)
lnFDI/GDP	0.0179** (2.76)	0.0637*** (4.70)	0.0126 (1.56)	0.0409** (2.79)
Intrade/GDP	0.382*** (22.94)	0.444*** (11.29)	0.468*** (21.80)	0.439*** (10.12)
lnGDPpc	-0.0866*** (-14.69)	-0.0229 (-1.85)	-0.0703*** (-8.73)	-0.00383 (-0.27)
lndistance	-0.332*** (-35.94)	-0.394*** (-17.59)	-0.257*** (-20.62)	-0.290*** (-10.61)
Contig	0.308*** (17.81)	0.529*** (13.23)	0.353*** (15.89)	0.611*** (12.77)
EU	<b>0.515*** (28.01)</b>	<b>0.647*** (16.27)</b>	<b>0.724*** (27.75)</b>	<b>0.894*** (16.22)</b>
RTAs	<b>0.337*** (18.72)</b>	<b>0.371*** (10.54)</b>	<b>0.337*** (11.54)</b>	<b>0.424*** (6.91)</b>
_cons	-8.731*** (-57.16)	-9.296*** (-28.65)	-9.810*** (-45.90)	-10.23*** (-27.05)
N	72457	27989	43244	19413

*t* statistics in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Furthermore we can conclude that the positive and significant semi-elasticity representing the role played by regionalism in the growth of IIT of EU members including NMS can be explained by the positive impact of Common Commercial Policy (CCP). This interesting finding can be expanded by the detailed analysis of regional trade agreements concluded by the EU. We propose division of these RTA into 3 groups: free trade agreements (FTA), customs union (CU) and economic integration agreements (EIA). We estimate the regression for EU and NMS to judge if the impact of CCP is different for NMS than for the whole EU (Table 3). This time we use data for the period 2004-2013 to analyze only the effect of CCP and not of trade policies of NMS dated before the accession.

*Table 3. Estimation of the results for IIT of EU and NMS*

	(5) EU after 2004	(6) NMS after 2004
lnGDPi	0.272*** (52.27)	0.325*** (17.27)
lnGDPj	0.311*** (39.54)	0.266*** (15.27)
lnFDI/GDP	0.00815 (1.01)	0.0312* (2.15)
Intrade/GDP	0.479*** (22.49)	0.469*** (10.93)
lnGDPpc	-0.0685*** (-8.53)	-0.00700 (-0.51)
Ln distance	-0.289*** (-24.24)	-0.316*** (-12.50)
Contig	0.324*** (14.53)	0.559*** (12.33)
EU	0.643*** (27.00)	0.874*** (17.16)
CU	0.466*** (11.65)	0.568*** (6.92)
EIA	0.387*** (6.05)	0.501*** (3.98)
FTA	0.00168 (0.02)	0.326* (2.33)
_cons	-9.568*** (-45.93)	-10.12*** (-27.88)
N	43244	19413

t statistics in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Interesting conclusions can be drawn from the estimates of parameters on dummies representing the impact of CCP on the EU members' trade specialization. First we should admit that the intra-EU integration is more significant from the perspective of the IIT growth both for old and new EU-members.

The impact of regionalism on IIT growth is significant and positive for all free types of agreements. However this impact differs among the types of RTA. It is stronger for CU and EIA than for FTA (both for the old and the new EU-members). It means that the scope of economic integration matters.

However we have to remember the critics of Eichengreen and Irwin (1998, 34-35) warning against underestimating the role of the historic ties and conflicts. The authors realized that dummy variables for RTA membership can indicate a substantial effects long before the

agreement in question is signed and even its predecessors came into operation. Sometimes this variable does not change after a successful conclusion of RTA. In such cases measures of RTA membership are contaminated by omitted-variables bias (these variables are eg. past trade patterns influencing current trade).

#### 4. CONCLUSION

The gravity models are important and popular instruments for estimating the effects of regionalism on IIT. However there is a lack of studies that clearly distinguish between effects based on the different stages of economic integration.

In this paper we have shown that the economic integration plays a significant and positive role in the IIT growth. Our important finding is as well that the stage of economic integration also matters. In general, we can conclude that CCP is beneficial for both: the old and the new EU Member States and the type of RTA plays a crucial role in generating these impacts. The more comprehensive and deeper RTAs, the more positive impact they got on growth of IIT.

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#### LITERATURE

1. Balassa B. (1986), Intra-Industry Trade among Exporters of Manufactured Goods, w: Greenaway D., Tharakan P.K.M. (1986), Imperfect Competition and International Trade: The Policy Aspects of Intra-Industry Trade. Wheatsheaf Press, Brighton pp. 108-128
2. Balassa B., Bauwens L. (1987), Intra-Industry Specialization in a Multi-Country and Multi-Industry Framework, The Economic Journal, vol. 97, December 1987, pp. 923-939
3. Beckerman W. (1956), Distance and the Pattern of Intra-European Trade, in: The Review of Economics and Statistics, Vol. 38, Nr 1 (Februar), pp. 31-40
4. Bergstrand J.H. (1990), The Heckscher - Ohlin - Samuelson Model, the Linder Hypothesis and the Determinants of Intra-Industry Trade, The Economic Journal, wyd. Royal Economic Society, vol. 100, nr 403, December 1990, pp. 1216-1229
5. Bergstrand J.H., P. Egger, M. Larch (2010), Economic Determinants of the Timing of Preferential Trade Agreement Formations and Enlargements; paper on ELSNIT IX Annual Conference: Revisiting Regionalism, Appenzell
6. Clark D.P. (1998), Determinants of Intra-industry Trade between United States and Industrial Nations, International Trade Journal, Vol. 12, No 3
7. Czarny E. (2002), Teoria i praktyka handlu wewnątrzgałęziowego, seria: Monografie i opracowania 496, SGH, Warszawa
8. Czarny E., P. Folfas (2011), Modele grawitacji jako narzędzie analityczne w ekonomii międzynarodowej, w: Rola informatyki w naukach ekonomicznych i społecznych. Innowacje i implikacje interdyscyplinarne, t.2, Wyd. Wyższej Szkoły Handlowej, Kielce 2011, 146-156
9. Czarny E., J. Menkes, K. Śledziwska, Gravity Model and OECD in Territorial Division of the World, Argumenta Oeconomica, 2010, Nr 2(25), s. 79-94.
10. Eichengreen B. D.A. Irwin, The Role of History in Bilateral Trade Flows, in: The Regionalization of the World Economy, ed. J.A. Frankel, The University of Chicago Press, Chicago, London, pp. 33-57
11. Falvey R. (1981), Commercial Policy and Intra-Industry Trade, Journal of International Economics, vol. 11, pp. 495-511

12. Frankel J., S. Wei (1993), Trade Blocks and Currency Blocks, NBER W.P. 4335, NBER, Cambridge Mass.
13. Frankel J., S. Wei (1995), European Integration and the Regionalization of World Trade and Currencies: The Economics and the Politics; CIDER W.P. C95-053, University of California at Berkeley, Berkeley
14. Grubel H.G., Lloyd P.J. (1975), Intra-Industry Trade: the Theory and Measurement of Intra-Industry Trade in Differentiated Products, Macmillan, London
15. Helpman E., Krugman P. (1985), Market Structure and Foreign Trade, The MIT Press, Cambridge Mass., London
16. Irac D. (2006), Revisiting Proximity-Concentration Trade-off: Distance and Horizontal Foreign Investment in OECD Countries, Ban de France, NER-E 153
17. Krugman P.R. (1981), *Intra-Industry Specialization and the Gains from Trade*, Journal of Political Economy, vol. 89(5), s. 959-973
18. Matthews K. (1998), Intra-Industry Trade: An Australian Panel Study, "Journal of Economic Studies, Vol. 25, No 2/3, pp. 84-97
19. Whalley J. [1998], Why Do Countries Seek Regional Trade Agreements?, in: The Regionalization of the World Economy, ed. J.A. Frankel, The University of Chicago Press, Chicago, London, pp. 63-83



## SUSTAINABLE ECONOMY AND MANAGEMENT SYSTEMS

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### ABSTRACT

*Sustainable economy which includes care about large number of aspects and influences which are generated as a result of certain economic entity becomes more and more a requirement of a successful development. The consequence is also a development of new management systems which are in function of sustainability or emphasize some of its segments as environment. More and more management systems include a tendency that everything that is being done is for a sustainable economy.*

*Systems that are present on the market in the last decade and gaining in importance and are mostly related to the sectors that are related to consumption of resources and are mostly implemented, maintained and certified through integrated management systems. However, given the increasingly interdisciplinary nature of the organization but also an increasing number of management systems, organisations are finding difficult to manage in variety of standards and management systems, to recognize the importance of each of them and decide correctly for application of those of which all sides will benefit the most.*

*This study will provide a review of the current situation in Republic of Croatia in implementation and certification according to various standards and will emphasize the differences of particular management systems and their ability of integration. The emphasis is on the following standards: ISO 14001, FSC (FM i COC) PEFC (FM i COC), GLOBAL GAP, ISO 50001, EMAS, ETS, ISCC.*

**Keywords:** *environment, management systems, sustainability*

### 1. INTRODUCTION

Considering the highest recognition of international standards in the field of sustainability and their direct connection to the environment, we will give a brief review of the environmental management system.

In our everyday life we are witnesses to rising awareness among the people about a need for development of sustainable economy, protection and conservation of the resources at our disposal. Accordingly, requirements generated towards economic entities to adjust their business to the requirements of a sustainable economy are higher and higher. Awareness on the need of harmonization of business with those requirements is increasing day by day and companies mostly accept their responsibility in the preservation of natural resources and need to perceive all aspects of survival.

As a help in achieving these objectives various management systems which with their requirements partially become manuals to guide company activities towards sustainable business are used more and more. Requirements of individual management systems are fully

or mostly compatible with certain aspects of sustainable economy. With this study one would like to help companies to gain a brief overview of existing management systems in order to facilitate the decision on their implementation. A large number of developed management systems bring companies in the situation that it becomes difficult for them to identify and opt for the application of the system that suits best to their business needs. The mere application of the management systems and their eventual certification greatly assist in achieving the objectives related to sustainable economy. Additionally they are helping significantly in recognizing of those activities from the public. Instead of a broad elaboration of activities undertaken sometimes is simply enough to mention which management system is implemented.

## **2. MANAGEMENT SYSTEMS IN FUNCTION OF SUSTAINABILITY**

### **2.1. Standard iso 14001**

International standard ISO 14001 sets requirements for planning, establishment, implementation, application and monitoring of the environmental management system.

Through the environmental management system one ensures the reduction of adverse impacts to the environment, timely response in case of accidents or emergencies, cost reduction, harmonization of business with legal requirements and other requirements and positive image of the company in public.

Positive and active attitude towards the environment has become an important indicator of business success with an emphasis on business focused towards sustainability.

### **2.2. FSC - Forest Stewardship Council**

The Forest Stewardship Council - FSC was grounded in 1993 with the support of major environmental non-government organisations such as World Wildlife Fund, Friends of the Earth and Greenpeace. FSC is an international certificate and labeling system that guarantees that products made of wood and paper are carrying FSC mark come from forests and sources which are being managed environmentally responsible, socially beneficial and economically viable.

FSC FM - Forest management certification – certification of forest management and FSC COC - Chain of Custody – certification of traceability chain.

FSC accredited certification means that forest is being managed according to the strict environmental, social and economic standards.

Government company “Hrvatske šume” holds FSC certificate for forest management since year 2002. FSC certificate represents a great honor and international acknowledgement for forest management which is conducted according to strict criteria. Also, in the last few years certificate is being owned by many private forest owners in the Republic of Croatia. Thus, Croatian Forestry profession which for generations manages extremely significant national resource received great recognition.

Companies in the wood processing sector recognized that same opportunity and therefore today in Croatia there are over 250 FSC COC certified companies that have gained huge comparative advantage. Existence of the certificate stimulates export orientation of our timber industry in a way to achieve higher product added value.

Considering that certification is a process and not one-time action means that certification is permanent commitment to responsible management of critical importance.

FSC COC - chain of custody- certification represents confirmation of chain of custody for sustainable development of world's forest resources, forest ecosystems and therefore and environmental balance of our planet in general. Chain of custody accompanies FSC certified material throughout production process from forest to consumer including all phases of

transformation and all owners in the production chain must be holders of FSC certificate in order for final product to be labeled with prescribed FSC labels.

Such labels represent a link between responsible production and consumption and allow consumers to make a decision about social and environmentally responsible purchase.

FSC CoC - chain of custody certification helps carriers of those certificates through improved marketing approach in growing environmental and conscious sector.

Croatian companies that offer their products (made of raw material of forest origin) on the international market, especially European market are increasingly faced with the requirements for FSC certificate as a condition for purchase of their products. Unfortunately it is very rare that such requirements are set by consumers and clients from Croatia and for now, that is telling us that as a society we still did not sufficiently recognize the importance of owning a certificate and that that is not just a requirement but one of the foundations of sustainability in business.

### **2.3. PEFC – Certification of forests and Chain of custody – COC**

PEFC certificate is similar to FSC certificate for sustainable managing of forests and it ensures forest owners and independent recognition of their forest management practices.

Forest management is a long term process. The results of a good practice can often be seen and become clear only after a series of decades.

In Croatia, PEFC COC certificate has not got so much importance because there are no certified forests according to the same principle but requirements and certified companies sporadically appear because they want to be a part of the international network where sustainability is one of the fundamental requirements.

### **2.4. ISO 50001 – Energy management systems**

Standard, that is still not well known in Croatia (lack of production and energy consumption and investments related to energy efficiency). In short, it is an upgrade of the standard ISO 14001 – Environmental management system with an emphasis on resource consumption.

Management systems provide continuous improvement in the field of quality, environment and safety. Now is applied to the energy consumption as well.

Due to the large demand for energy of new, growing markets and declining available fossil fuel reserves, and in connection with the above higher fuel prices, but also the negative impact of fossil fuel use on the environment - "greenhouse effect", energy (non) efficiency is expressed as a problem of the utmost importance in the world in recent years. The problem of energy management is particularly pronounced in the industry – as a large energy consumer.

One of the key factors in the successful development of business entities is to protect the environment and permanent optimization of energy management systems through standard ISO 50001 to support companies and other organizations in development of systems and processes designed to increase their energy efficiency.

According to current legislation certified companies or large companies do not have to perform energy review because certificate ISO 50001 is equally valuable and thus benefit from the lower energy costs and investment costs as well as from permanent optimization of energy efficiency. Optimizing the energy consumption reduces CO<sub>2</sub> emissions, and strengthens the awareness of employees about the importance of preserving the environment.

ISO 50001 can very easily be integrated into existing quality system, safety system or environmental management system for all types of organisations that want to monitor and improve energy efficiency.

### **2.5. EMAS - Eco-Management and Audit Scheme**

EMAS (Eco-Management and Audit Scheme) is environmental management system and a system of an independent assessment by which organisations measure the impact of their

activities to the environment, inform the public on current assessment of the impact and improve efficiency of work in accordance with the requirements of environmental protection. The inclusion of the organizations into EMAS is voluntary and available to all economic sectors (public and private sectors) or legal and private entities – tradesmen.

EU Eco-Management and audit scheme (EMAS) is a tool for managing of companies and other organisations for evaluation, report and improvement of their environmental protection. Originally, program is available since 1995 and was limited to companies in industrial sectors. EMAS today, is open for all economic sectors including public and private services.

Unlike the international series ISO 14000 EMAS is not standard but Regulation of the European commission. For both mentioned environmental management systems we can generally say that they strive to accomplishment of the same goals but in a slightly different manner. ISO 14001 leans to legislation of the country in which system is being certified whilst EMAS, as a condition of accession of one country to the EU, requires an adjustment of existing legislation with EU legislation.

If we compared requirements that these two mentioned systems place in front of interested organisations we can conclude that EMAS contains requirements of standard ISO 14001 and that, in aspect related to legislation, requires more than standard ISO 14001. Furthermore, these systems differ in terms of conducting an initial assessment of the impact on the environment, availability of politics, goals and indicators to the environment, the public, frequency and conducting an independent audit, assessing the impact on the suppliers, the involvement of employees in the process of continuous improvement of the environmental impact, providing information about significant aspects of the environment to the interested parties, use of logo etc. As a conclusion let us point out that the organization that has implemented and maintained system ISO 14001, is in the position that, with relatively little effort meet the requirements of the EMAS Regulation, where the management system certification according to ISO 14001 is not a prerequisite for EMAS registration.

Since the above mentioned environmental management systems have a similar goal that can be reached by various routes, it can be expected that interested organizations will finally opt for the system that they will find more appropriate and more suitable for achieving more direct and indirect benefits.

## **2.6. GLOBALGAP**

Standard EUREPGAP has been published first time in 1997. It has been published Euro-Retail Produce Working Group (EUREP) consisting of European food retailers, farmers and members of various interest associations. The standard is defined at the request of customers to create a universally accepted norm of good agricultural practice (GMP / GAP), documented in a way that is suitable for the implementation of the certification process according to internationally accepted procedures. The standard applies to all activities on the farm. The standard is based on the application of Good Agricultural Practice (GMP / GAP), integrated software control of pesticides (IPC), Quality Management System (QMS) and HACCP principles.

The aim of the application is to strengthen consumer confidence in the quality and safety of agricultural products, reduction of negative impacts of conventional agriculture on the environment and continuous concern about the health and safety of employees in the agricultural production and animal breeding. After ten years of application of EUREPGAP requirements in Europe and its application and recognition on the other continents (America, Africa, Australia, Japan and Thailand) in September 2007 EUREP group announced a change of the name from EUREPGAP to GLOBALGAP.

Today the certification of products / production according to GLOBALGAP appears as one of the key recommendations of retail chains directed towards suppliers of agricultural products.

By assessment of compliance of its production process or product according to the requirements of the GLOBALGAP manufacturer does not only fulfill the requirements of the standard but through commitment directs him self to the creation of sustainable agriculture, agriculture that will, through careful management of soil, air and water, remain in use and for future generations. In addition to creating a modern agricultural production manufacturer raises its competitiveness and opens the gate to the international market of agricultural products. GLOBALGAP certificate represents a passport of agricultural products for the international market.

## **2.7. ETS – Verification report on greenhouse gas emissions**

Last couple of years, a system of greenhouse gas emissions trading is applicable in Croatia and it functions on the principle of restriction of permitted quantity of greenhouse gas emissions, so called quota, which can be emitted by different plants included by the Directive.

Restriction of permitted quota is decreased from time to time and final goal is s that in 2020 total emissions from the sectors covered by EU ETS be 20% lower than the level of emissions in 1990. Each year a plant payer must own several emission units needed to cover verified ones, where payer can, if he reduces its greenhouse emissions by investing in new, energy more efficient technologies, keep the remaining emission units for covering of future needs or he can sell them to the other payer which lacks emission units for covering of verified ones.

In that phase, in Republic of Croatia authorized institutions apply unique distribution quota which is valid in entire EU. Emission units are distributed at the auction where plants to which emission units are assigned for free are compliant to the harmonized distribution rules valid in entire EU.

Regulation on greenhouse gas emission allowance recognizes facilities and activities that are obliged to obtain a permit to emit greenhouse gases. All plants also must be included in the European system of trading greenhouse gases (ETS).

The verification follows a risk based approach to create a verification opinion with reasonable assurance, while the verifier is responsible for the preservation of the principles of good governance and he creates its report so that the emission data in the report are presented accurately, than report on emissions does not contain omissions or errors and in the end that the emissions are in accordance with the permit for greenhouse gas emissions.

## **2.8. ISCC Certification**

ISCC is also new requested type of of certification which relates to agricultural products, as well as to all the participants of the production and distribution chain: farmers, silos, traders, oil factories, Biodizel factories and other. In last couple of years there is more and more requests for ISCC certification which is set as a requirement from international companies to our producers and exporters for export and trade.

In period from 2014 to 2020 the EU will pay special attention to rural and sustainable development.

European Commision brought a Directive on renewable energy which defines general framework for development of renewable energy and so biofuels are desirable only if they are produced in a sustainable manner. Within the ISCC system there is a developed possibility of calculating the amount of greenhouse gas emissions from biofuels. For their use it is prescribed that they must achieve savings of at liest 35% of greenhouse gas emissions compared to fossil fuel. Raw materials for bio fuel must not be produced on the grounds rich in biodiversity and large pools of carbon if they wish to receive a certificate.

The system lies on traceability chain (Chain of Custody), so certification is being conducted in the similar manner as for other typs of COC certifications (for example FSC COC).

### 3. CONCLUSION

The increasing demands of the public, legal regulations, various associations and movements are placing a greater importance on the need to manage the company in a way to respect the rules of economic sustainability. An increasing number of companies are trying to adjust its business to these requirements and at the same time are facing the problem of how to present their activities to the public in a credible manner and not to engage too much resource (time, money...).

Various international Organisations for standardization, for many years now, are issuing more and more standards which define management systems for companies complied with requirements of sustainable management. From comprehensive standards for environmental management to the protection of forests and agricultural production all those standards are in function of attempting to structure requirements for the operation of the company in a way to preserve natural resources.

Very often, implementation of some management systems is the simplest way to present the activities of each company to the public in this segment. Instead of a broad representation of companys activities sometimes it is enough to state that it has a certain certificate. In the future we expect an increasing number of certificates according to standards that promote sustainable business because the benefit is multiple. By implementation of specific management systems one can achieve a harmonization of business with the idea of a sustainable economy and reputation in public.

### LITERATURE

1. International Organization for Standardization: *ISO 9001:2008 Quality management system – Requirements*, Geneve, 2008

# THE PROCESS OF INTERNATIONALIZATION IN HIGHER EDUCATION AND ITS IMPACT ON EFFICIENCY OF WORKING FORCE (CASE STUDY: JOHN NAISBITT UNIVERSITY)

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## ABSTRACT

*This paper analyses the phenomenon of internationalization of the university and multiple benefits it provides to both society and students. It also looks into the phases of the development of John Naisbitt University, the leader in education and the oldest private university in Southeast Europe. The focus of the paper is on the on-going phase, the phase of internationalization and achieved results, together with future plans. It will also show, how this process is reflecting on the efficiency of future work force (students) that are attending those programs at the University.*

**Keywords:** *efficiency, higher education, internationalization, University, work force*

## 1. INTRODUCTION

Education is one of the most important aspects in people's everyday life. The society cannot improve progress, if it doesn't have a proper educational system, qualified teachers and good students. In order to achieve that, a country needs to invest heavily in its educational system. John Naisbitt University has been the leader in higher education in Southeast Europe for more than two decades. Over the period of time, we have witnessed a tremendous progress, overcome barriers and cultural differences, and facilitated access to information and its exchange in modern world and its fast paced environment. Currently, John Naisbitt University is in the phase of development and internationalisation where we endeavour to expand our operations globally. John Naisbitt University has internationally recognized educational, arts and science programs, harmonized with Bologna declaration. John Naisbitt University collaborates with most distinguished national and foreign universities and scientific institutions, and thus has an international academic network, which allows circulation of its scientific research in educational processes. Cultural cooperation and exchange programs organized by University's International Cooperation Department actively contribute to the improvement of relations between our country and the rest of the world. In the on-going phase of internationalization, John Naisbitt University can boast an outstanding network of partner institutions comprising over 200 most renowned universities from all over the world, membership in the most prestigious university networks around Europe and the world and participation in a number of international student mobility projects, teaching and research staff and programs.

## **2. THE IMPORTANCE OF INTERNATIONALIZATION FOR IMPROVING QUALITY OF HIGHER EDUCATION**

During the last decades, universities worldwide are forced to keep up with the rapid changes in social, technological and economic achievements and increasingly dynamic international academic environment. The changes which are hard to predict, the complexity and competitiveness of global economy affect political, industrial and other spheres. They also have a permanent impact on higher education institutions and require from them to respond to the changes in the environment promptly. In the light of the current global trends, international inclusion and competition between higher education institutions is becoming an increasingly significant aspect of everyday life. This is precisely the reason why the internationalization of the university is becoming more intense in both global education industry and its promotion through various rank lists of universities. The implementation of education that can be recognized internationally and the initiatives for international educational coordination activity with organizational consistency are considered vital when universities continue to work on internationalization based on their strategies. Promoting internationalization steadily is expected by establishing a specific goal including setting the numerical targets related to the initiatives which aim at developing international competitiveness and achieving them at universities. International exchange is also essential in order to give students and teachers access to international academic environments and to remain competitive in an increasingly globalized education market.

## **3. THE INTERNATIONALIZATION PROCESS AT JOHN NAISBITT UNIVERSITY**

The expansion of the activities that contribute to internationalization of universities is a global trend which has been on the increase in recent years. In order to boost competitiveness of higher education institutions and offer attractive and high-quality education to international students, it is vital that universities develop as internationalization centres where professors, researchers and students will be provided with high quality education, research and mobility. John Naisbitt University is the oldest and the biggest private university in Southeast Europe. It consists of 14 higher education institutions, has 400 permanent employees and over 25,000 students. The university has successfully completed the first two phases of development - the first phase which involved gathering distinguished professors holding various academic degrees and prospective teaching associates and teaching assistants. The second phase resulted in modern, state-of-the art buildings with cutting edge equipment where students attend their lectures. Having completed these two phases, John Naisbitt University has started the third phase - the internationalization phase. Our vision is to have an internationally recognized academic institution that will provide our students with comprehensive knowledge of languages, other cultures and international relations in Serbia and worldwide. We have developed the 2013-2017 Plan aiming to achieve the following objectives:

- Developing our capacities to generate and share knowledge in Serbia, Europe and many other countries worldwide;
- Working effectively with other institutions and organisations, where such partnerships can lead to outstanding research and teachings;
- Enhancing structures for collaboration across departments and colleges within our University;
- Ensuring, through commitment to the personal education of each student, that the values, skills and intellectual disciplines they have acquired at John Naisbitt University are applied in their future lives and careers;
- Contributing effectively to the cultural, social and economic development of our country;



- Recruiting and retaining the best academic staff and ensuring that underrepresented groups have equal opportunities in recruitment, personal development and career progression in all fields of employment within the University.

Although not completed yet, the third phase - internationalization phase of the University, has already delivered the following excellent results:

- Over 200 concluded cooperation agreements with most prestigious foreign universities worldwide
- Participation in international projects TEMPUS/ERASMUS/IPA funded by the European Union
- A very active program of student and staff exchange with other universities - strategic partners
- A large number of guest professors and lectures of distinguished scientists, Nobel prize winners and academicians
- Organization of summer schools for both foreign and domestic students
- An increasing number of foreign students at doctoral studies at Megatrend University
- Joint master's program with Franklin University, Ohio
- Joint master's program with University Primorska, Kopar, Slovenia
- Joint doctoral studies with Libera Università Mediterranea Jean Monet, Bari, Italy
- John Naisbitt University has won numerous domestic and foreign acknowledgements, one of them being the award from American Quality Association – AQA and European Quality Award.

The above mentioned suggests that JNU implements the internationalization phase on all three levels - internationalization of students, internationalization of staff and internationalization of curriculums. This phase of development requires a new project which would focus on more intensive internationalization of the first level, i.e. student internationalization. So far, JNU has been the leader on the market, pushing the boundaries of higher education in Serbia by introducing innovative programs and new ideas. The project is precisely the next step in the process of differentiating JNU from other universities in the region.

The project involves launching the program of undergraduate studies at Graduate School of Business Studies and Graduate School of Computer Sciences in the English language and online distance learning program which would enable foreign students from all over the world to study at John Naisbitt University.

### **3.1. Project objectives**

This project has many objectives but the most important are:

1. Increasing mobility of both foreign and domestic students
2. Increasing competitiveness and quality of studies at John Naisbitt University
3. Creating a program of undergraduate studies in the English language
4. Continuous influx of foreign students to John Naisbitt University
5. Increasing the revenue of John Naisbitt University
6. Introducing international and intercultural elements in teaching, research process and John Naisbitt University services
7. Strengthening bilateral and multilateral cooperation
8. Encouraging brain circulation instead of brain drain

### **3.2. The analysis of student mobility**

The term “internationally mobile students” refers to students who have crossed a national border to study, or are enrolled in a distance learning programme abroad. These students are not residents or citizens of the country where they study. Internationally mobile students are a

sub-group of “foreign students”, a category that includes those who have permanent residency in the host country (1). Nowadays, it is more than evident that number of students crossing international borders to attend institutions of higher education has risen significantly in the last few decades. According to the data of UNESCO Institute for Statistics (2) the number of mobile students in the world increased from 2.1 million to 3.4 million in the period from 2002 to 2009. However, this percentage decreased by about 50% in 2002 due to increased competition on the international level. It is likely that during economic crisis students will take into account economic aspects of mobility, which makes Serbia a good academic destination. In 2012, at least 4 million students went abroad to study, up from 2 million in 2000, representing 1.8% of all tertiary enrolments or 2 in 100 students globally.(3) Five most common destination countries are: United States (18% of total mobile students), United Kingdom (11%), France (7%), Australia (6%) and Germany (5%). (4) That means that those countries together attract more than 45% of mobile students. When it comes to the countries where foreign students come from, the top five are the following: China (694,400 students studying abroad), India (189,500), Republic of Korea (123,700), Germany (117,600) and Saudi Arabia (62,500). (5) Using the same source, UNESCO Institute for Statistics, there is also a list of regions that host the largest number of mobile students: North America and Western Europe (57% of total mobile students), East Asia and the Pacific (20%) and Central and Eastern Europe (10%). It is particularly important to emphasize that year after year China and India have marked a double digit growth of the number of mobile students. It is estimated that China and India together will have 40% of all foreign students in the OECD and G20 countries by 2020. (6) On the other hand, the share of foreign students in the countries of the European Union is 6.7%. When it comes to the region, the situation is similar to ours. John Naisbitt University has, therefore, recognized the need for overcoming obstacles and strengthening international mobility. To support this goal John Naisbitt University is paying special attention to student mobility statistics regarding Serbia, provided from UIS for 2014. According to this source, total number of students from Serbia studying abroad is 11879, which gives outbound mobility ratio 5 (mobility ratio is total number of tertiary students from the country studying abroad, expressed as a percentage of total tertiary enrolment in that country) and gross outbound ratio of 2.8 (outbound ratio is total number of tertiary students from the country studying abroad, expressed as a percentage of the population of tertiary age in that country). Furthermore, Serbia is hosting 8930 international students, which gives inbound mobility rate of 3.7.

Key Indicators	
Students abroad:	
Total number of mobile students abroad	11,879
(% of total mobile students)	...
Outbound mobility ratio	5.0
Gross outbound enrolment ratio	2.8
Students hosted:	
Total number of mobile students hosted	8,930
(% of total mobile students)	...
Inbound mobility rate	3.7

*Picture 1: Flow of tertiary-level students in Serbia*

(<http://www.uis.unesco.org/Education/Pages/international-student-flow-viz.aspx>, retrived 20.11.2015.)

### 3.3. SWOT analysis of the project

The SWOT analysis is basic stage for pointing out major strategic issues to be addressed in before mentioned internationalization process plan. As it is known, SWOT analysis is a tool that identifies the strengths, weaknesses, opportunities and threats of an organization. The method of SWOT analysis gives both, the internal and the external analysis on factors that give an organization advantages and disadvantages in realizing target goals.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>- Excellent infrastructural preconditions</li> <li>- Good geographic location</li> <li>- Quality education at affordable prices (Low tuitions fees)</li> <li>- Literature in English</li> <li>- Lecturers who have excellent knowledge of the English language</li> <li>- Experience in European exchange programs</li> <li>- Experience in joint programs with European and global institutions</li> <li>- Contacts with partner and other institutions</li> <li>- Broad subject range</li> </ul>	<ul style="list-style-type: none"> <li>- Aversion to studying in the English language</li> <li>- Lack of administrative personnel who speak the English language</li> <li>- Lack of diversity among staff</li> <li>- Faculty workload</li> <li>- Lack of space for holding parallel lectures</li> <li>- Alumni network is not active</li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>- Lower costs of living in Serbia</li> <li>- European funds for science and mobility</li> <li>- Increased number of mobile students worldwide</li> <li>- Building a brand</li> <li>- Gaining further experience</li> <li>- Knowledge transfer</li> </ul>	<ul style="list-style-type: none"> <li>- Political and economic instability</li> <li>- State bureaucracy</li> <li>- Complicated administrative procedures</li> <li>- Visa regime</li> <li>- Lack of institutional support by the Ministry of Education</li> <li>- Competition on both domestic and foreign market</li> <li>- Budget constraints</li> </ul>

*Picture 2: SWOT analysis - Internationalization process at John Naisbitt University*

As it can be seen in table, John Naisbitt University has a strong foothold in its strengths. Serbia has great geographic location, and university itself is situated in the capital city. All hosted students can enjoy low cost of living and above all, they can gain quality education with very low tuitions fees. It is obvious that the introduction of the program of studying in the English language is the most significant measure for increasing the number of foreign students, both those who attend exchange programs and those who come to complete their studies. The decision to introduce this program of undergraduate studies is the result of comprehensive analyses of potentials of academic staff and literature and the analysis of profitability based on

the needs and interests of foreign students. These factors give excellent preconditions for further plan of internationalization possibilities such as: gaining more experience, establishing knowledge transfer, and finally, building recognizable brand in the area of successful and quality education programs.

All of this strengths and possibilities should be used to overcome the identified weaknesses (faculty workload; lack of administrative personnel who speak the English language, inactive alumni network, lack of diversity among staff...) and to create safe environment in which University can be ready to deal with external threats. Reviewing and adjusting business philosophy of the University, captured through business plan steps, could be one of possible paths in battle against threats, specially if we are talking about issues like budget constraints and wide competition.

#### **4. THE IMPACT OF INTERNATIONALIZATION PROCESS OF HIGHER EDUCATION ON THE EFFICIENCY OF WORKING FORCE**

Thanks to the process of globalization we are witnessing the great improvement in mobility of working force all over the world. Trends are showing us that number of the people who are going to other countries to work is increasing. This part of the paper will provide information's regarding this process and its connection to the efficiency of working force.

During the Turkish G20 Presidency, there was an initiative among G20 countries to find out what is current situation regarding the contribution of labour mobility to the economic growth of this countries. Countries involved requested that three international organizations – ILO, OECD and the World Bank Group prepare analytical report about this subject. Their findings were next (7):

- More than half of the world's migrants (55 per cent or 128 million people) live in the G20 countries, and remittances to and from G20 countries account for almost 80 per cent of global remittance flows.
- Migrants today are younger and better educated, and women are increasingly migrating for employment, with domestic work being a major occupation.
- Evidence suggests that in most countries migrants pay more in taxes and social contributions than they receive, and contribute substantially to destination countries' economies by providing the labour and skills needed in critical occupations and sector.
- Across the advanced countries, the number of highly educated immigrants has increased rapidly over the past decade, which has important implications for productivity and innovations.

We can see that these findings suggest that the mobility of working force within G20 countries is growing, and there are some changes in the structure of foreign labour force (e.g. more women and higher educated people than before).

Besides that, if only take into the account EU countries, we will also see that situation is similar there. According to the European Commission and its EU Employment and Social Situation Quarterly Review (ESSQR), that was issued in 2014, in year 2013 there were slightly over 7 million EU citizens who were working and living in an EU country other than their own. They represented 3.3% of total employment in the EU.(8)

In the analysis that was given by ESSQR in that issue we can find that they identified several advantages of mobility of working force within EU (9):

- Free movement of workers brings benefits both to the workers and employers concerned.
- The right to work in another Member State can bring new job opportunities for individuals. It also offers other advantages, such as acquiring new types of working experience, and improving their skills, notably learning languages. All this enables them to take up more internationally oriented jobs. With the experience gained, they may also find a job more easily in their countries of origin later on.
- Labour mobility helps address labour shortages and skills gaps. From a macro-economic point of view, it helps address unemployment disparities between EU Member States and contributes to a more efficient allocation of human resources.
- In the host country, incoming workers benefit the local economy by addressing skills shortages and labour market bottlenecks. They help widen the range of services available and boost competitiveness. In the countries of origin, mobile workers alleviate the burden on public accounts (if previously unemployed) and help to revive the national economy by sending remittances.

Judging by this numbers and conclusions we can see that emigration of working force is a process that will not stop in next years, and that we can only expect that it will increase.

So, what then will be the role of the Universities all over the world in next couple of years, and how will this process of globalization and internationalization affect their way of working and teaching? How it will affect students way of learning and their efficiency?

In the analyses shown in previous passages the authors of this paper showed that the process of internationalization at John Naisbitt University was the only logical move in our Universities strategy, and it changed the way that we were teaching and dealing with problems.

After the years of developing at the domestic market, we realized that the next thing that needs to be done is attracting students that are coming from abroad. Of course we still could use some of teaching stuff that was already working here, but we also need to employ new people, and to redevelop Department for International Cooperation.

So what we can tell about the advantages of studding abroad and how we can improve the efficiency of foreign students that are coming to John Naisbitt University?

- First of all, students that are coming to our University are mostly coming from Mexico and China. These are the countries that have some things in their educational program that are similar to ours, but most of them are different. So, by coming to our country, they will learn more new stuff, that otherwise they will not have the opportunity to learn in their country. By doing that they will be more prepared for this globalized world and competitiveness at the work force market.
- Since they have classes in English and in Serbian, their ability to communicate and learn and present stuff in foreign languages is improving. In Serbia, we have an old saying that claims: "You are rich as much as how many languages you know." So taking that into account, they will be richer for knowledge of two languages, and they will also be more competitive at the job market.

- Thirdly, for many students this is the opportunity to leave their home country for longer period of time. This will be also great opportunity for them to be more self-sufficient, to be more innovative and to accept new things as they happen. They will learn to leave among strangers. They will learn how to accept and understand different cultures. In today's society in which we have increasing number of MNC, this is a very useful skill.
- Managing money issues when they are abroad is also something very useful for the students. When staying abroad they know that they have a budget, and they need to stick with that. Or they can, if that is permitted by the law of one country, try to find part time job in order to earn more.
- Their knowledge about some foreign country or region can be a very helpful in their finding jobs. For example, if they stay in our country to find a job here, they will be prepared not only for doing business here, but they can also use connections that they have in their home country to bring new investors here. Or, if they return to their country, they can use connections coming from Serbia, to work together on joint projects.
- Also, domestic students from our University are grateful to the scholarship that we are giving to them - through the international agreements that we have with different Universities all over the world. They are more capable to do different types of jobs when they return home. For most of them this is also the opportunity to experience new stuff, to learn different languages and to make connections. When they return, they usually have more chances to find the job, because for most companies who are working all over the world international experience is something that they value very much.

We can summarize all the above mentioned by declaring that internationalization process in the field of higher education, is a first step towards internationalization of the young, educated students to become international working force. Their ability to adopt new things, to learn, to network, to socialize and to become organized will help them in their future positioning at the world labour market.

## 5. CONCLUSION

Having in mind that John Naisbitt university celebrates its 26<sup>th</sup> anniversary this year, and the fact that it was established and survived during the most difficult times for our country, we believe that the new cycle in the phase of development of our university will be marked by new achievements, modernized method of work and a significant contribution to development of higher education in the Republic of Serbia with regards to foreign students. Recently, there has been a lot of talk in Serbia about the need for changing image in the field of law, economics and education. Serbia used to have an outstanding image in higher education and this is just one of the ways to restore the old glory.

The achieved results of the internationalization process at John Naisbitt University prove that the process was approached meticulously, with a clear strategy and activity plan. During this phase, the program of undergraduate studies in the English language should be implemented, which will certainly be the most demanding implementation process so far. The paper provides the analysis which shows high chances of success of this project and positioning John Naisbitt University in the global scientific and higher education sphere.

Also, this process is good not only to University per se, but also to our domestic and international students. New way of learning, educating and working in different countries will help them to become more efficient students and at the end to become more efficient and

effective working force. Their competitive knowledge will help them to find job more easily and to pursue better carrier.

## LITERATURE

1. <http://www.uis.unesco.org/Education/Pages/international-student-flow-viz.aspx>, Retrived 20.04.2014.
2. <http://www.uis.unesco.org/Library/Documents/research-trends-international-student-mobility-education-2012-en.pdf>, Retrived 20.04.2014.
3. <http://www.uis.unesco.org/Education/Pages/international-student-flow-viz.aspx>, Retrived 20.11.2015.
4. <http://www.uis.unesco.org/Education/Pages/international-student-flow-viz.aspx#sthash.gliqdNkX.lH6tGva.dpuf>, Retrived 20.11.2015.
5. <http://www.uis.unesco.org/Education/Pages/international-student-flow-viz.aspx#sthash.gliqdNkX.dpuf>, Retrived 20.11.2015.
6. <http://www.oecd.org/edu/50495363.pdf>, Retrived 20.04.2014.
7. [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_398078.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_398078.pdf), Retrived 22.11.2015.
8. [http://europa.eu/rapid/press-release\\_MEMO-14-541\\_en.htm](http://europa.eu/rapid/press-release_MEMO-14-541_en.htm), Retrived 22.11.2015.
9. [http://europa.eu/rapid/press-release\\_MEMO-14-541\\_en.htm](http://europa.eu/rapid/press-release_MEMO-14-541_en.htm), Retrived 22.11.2015.

## SUBJECTIVE WELL-BEING AS PART OF WELFARE ECONOMICS IN EUROPEAN UNION COUNTRIES

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### **ABSTRACT**

*The aim of the paper was to compare the relationship between subjective well-being in Poland and European Union countries. A comparison of a sample social well-being index, which is the life satisfaction index, indicates that Poland ranks in the middle of European Union countries. In fact, Poland took first place in the post-socialist corporatist countries.*

*Both in Poland and other EU countries, groups of people with the lowest level of well-being are: unemployed people; people who are separated or divorced; people with lower levels of education; people with illnesses or disabilities that limit their daily activities; and people in the bottom income quartile. There is a difference in the age category. Europeans aged 35–50 have the lowest well-being. In Poland, people aged 75 and more have the lowest well-being.*

### **1. INTRODUCTION**

The aim of the paper was to analyse and compare the relationship between various aspects of living and subjective well-being in Poland and European Union countries. Data used in the study came from the research of the Central Statistical Office in Warsaw (Poland) and the 3rd European Quality of Life Survey. In this research, the most up-to-date data from 2013 was presented. Another data source was The European Union Statistics on Income and Living Conditions (EU-SILC). The main purpose of the EU-SILC is to deliver comparable data on living conditions for countries of the European Union. Based on this data, income, poverty, material deprivation, and selected aspects of social exclusion are calculated. EU-SILC also assumes the conduct of modular research, the subject of which addresses the current needs of European Union institutions. The Central Statistical Office in Poland aims to measure life quality in accordance with international recommendations, so it is consistent with the research methodology that is used in European Union countries. According to this concept, statistical measurement of quality of life takes into account its multidimensional nature. In principle, this measurement includes not only the entirety of objective conditions of living, but also subjective quality of life. The term used for it is subjective well-being. The measurement of subjective well-being should include perceived quality of life, i.e. the satisfaction people derive from various aspects and life as a whole, as well as elements pertaining psychological well-being and perceived emotional states.

### **2. CATEGORY OF SUBJECTIVE AND OBJECTIVE PROSPERITY**

Quality of life is a broader concept than economic production and living standards. It includes the full range of factors that influences what we value in living, reaching beyond its material side (Stiglitz, Sen, Fitoussi, 2009, p. 41). The improvement of quality of life and limiting excessive differences in the financial and social situation of all groups of the population is a basic aim of contemporary concepts of socio-economic development. Levelling disproportions in the widely understood standard of living and eliminating social exclusion also constitute a priority of social policy in the European Union and individual member states. Measurement of quality of life takes into account its multidimensional nature. In principle, this measurement includes not only the objective conditions of living, but also the subjective ones. It was assumed that core indicators pertain to persons or households and include both objective and subjective measures. Both types of indicators are to be regarded as complementary.



Dimensions of quality of life (*Quality of life indicators, online publication*):

- Material living conditions - Material living standards are measured on the basis of three sub-dimensions: income, consumption and material conditions (deprivation and housing). The most important indicator is income, because it has an impact on most of the other indicators in the framework.
- Productive or main activity- A number of activities fill up citizens' lives every day, the most important one is their work. Indicators measuring both the quantity and the quality of jobs available (working hours, balancing work and non-working life, safety and ethics of employment) are some of the indicators used in Europe to measure this aspect of quality of life.
- Health - Health is an essential part of the quality of life of citizens. Poor health can affect the general progress of society. Physical and/or mental problems also have a very detrimental effect on subjective well-being.
- Education - In knowledge-based economies, education plays a pivotal role in the lives of citizens and is an important factor in determining how far they progress in life. Levels of education can determine the job an individual will have.
- Leisure and social interactions - In Europe, this is measured in terms of how often citizens spend time with people at sporting or cultural events or if they volunteer for different types of organizations.
- Economic and physical safety - Safety is measured in terms of physical safety (e.g. the number of homicides per country) and economic safety. For the latter, wealth indicators should ideally be used, but for the moment there is no comparable data on the topic for all European countries.
- Governance and basic rights – The right to get involved in public debates and influence the shaping of public policies is an important aspect of quality of life. Moreover, providing the right legislative guarantees for citizens is a fundamental aspect of democratic societies.
- Natural and living environment - The protection of the environment has been very high on the European agenda over the last few decades. Exposure to air, water and noise pollution can have a direct impact on the health of individuals and the economic prosperity of societies.

All determinants have the appropriate indicators assigned enabling measurement of objective well-being. For example, the indicators assigned for the *financial living conditions* index include: average monthly disposable income; at-risk-of-poverty rate and multidimensional poverty rate; self-assessment of the household budget; participation of expenses on food and soft drinks and total expenses; bad sanitation indicator; households living in too small or too big flats; lack of money for food, holidays or a car. The variable *work* includes the following indicators: employment rate, unemployment rate and long-term unemployment rate, young people not working and not undertaking an education, working extended working hours, working based on a fixed-term contract, median of salaries and pension benefits and indicator of general job satisfaction. The next variable, *health*, contains the following indicators: persons with a limited capacity of do everyday activities; medical condition self-assessment; number of overweight and obese persons aged 15 and over ; number of persons smoking cigarettes every day; resignation from doctor appointments with specialists because of waiting time, lack of referral, and financial reasons. (*Quality of life in Poland*, 2014, p. 6 – 9). Basic components diversifying subjective and objective well-being and emphasizing the importance of subjective well-being are:

- the difficulty or even the impossibility to objectively measure the many elements of quality of life (e.g. the degree of evaluation of meeting higher order needs);

- knowledge about individual subjective well-being, social satisfaction, or living conditions can be significant in planning concrete actions in social-economic politics;
- subjective quality of life determines the behaviors and attitudes of individuals in public life;

### 3. SUBJECTIVE WELL-BEING INDEXES

With reference to recommendations of the Stiglitz Report (Stiglitz, Sen, Fitoussi, 2009), they assume that the statistical measurement of quality of life should include two dimensions: widely understood objective conditions and subjective well-being, which has thus far been ignored in formal statistics. The widely understood living conditions take into consideration as the following: financial conditions, health, education, economic activity, leisure time and social relations, personal safety, the quality of the state and basic rights, as well as the quality of the natural environment. The measurement of subjective well-being includes perceived quality of life, i.e. the satisfaction people derive from various aspects and life as a whole. There is no generally-accepted single definition of subjective well-being. Psychologists talk of 'psychological well-being' or 'positive mental health', which are typically considered in terms of "lives going well" comprising a "combination of feeling good and functioning effectively" (Huppert, 2008). Economists typically define subjective well-being more narrowly, excluding some of the facets that are included in the psychological approach. For example, physical and mental functioning are not considered as components of subjective well-being, but are rather viewed as their conditions. Equally, the meaning of life is not normally taken into account (Chapple, 2011). Subjective well-being refers to positive feelings about one's life and self. It is distinguished from objective measures of quality of life such as income, family circumstances or housing conditions. The distinction between 'subjective' and 'objective' in this context is not a reference to methods of measurement (as in self-report or non-self-report), but to what is measured: whether feelings or nonfeelings (Gasper, 2007, p. 9).

Seven dimensions of data quality using in Subjective well-being measuring are (*OECD guidelines on measuring subjective well-being, 2013, p. 34-35*):

- *Relevance*, i.e. the degree to which data serves to address the purposes for which they are sought by users.
- *Accuracy*, i.e. the degree to which data correctly estimate or describe the quantities or characteristics they are designed to measure.
- *Credibility*, i.e. the confidence that users place in statistics based on their image of the data producer.
- *Timeliness*, i.e. the length of time between the availability of data and the phenomenon or event that the data describe.
- *Accessibility*, i.e. how readily data can be located and retrieved by users.
- *Interpretability*, i.e. the ease with which the user can understand and properly use and analyse the data.
- *Coherence*, i.e. the degree to which the data is mutually consistent with other similar measures and logically integrated into a system of statistics.

Basic indicators of subjective well-being are:

- life satisfaction in general - percentage of persons (in households) aged 16 and over declaring that in general they are pleased with their life (choice on a scale of 0-10 values equal to 7 or more);
- composite indicator of a sense of well-being - percentage of persons in households aged 16 and over who within 4 weeks declared the co-occurrence of 2 positive emotional states (felt happy; calm and in control) and lack of occurrence (or very rare occurrence) of 3 negative indications of bad mood (didn't feel upset; didn't feel discouraged, didn't feel down; didn't feel depressed, in such a way that nothing could raise their spirits);

- composite indicator of malaise - percentage of persons in households aged 16 and over who within 4 weeks experienced at least 3 of 5 indications of malaise (they never or very rarely felt happy; never or very rarely felt calm and in control; felt very much upset; felt discouraged, felt down; felt depressed, in such a way that nothing could raise their spirits);
- feeling of having meaning in life - percentage of persons (in households) aged 16 and over declaring that what they are doing in life is valuable (choice on a scale of 0-10 values equal to 7 or more);

#### 4. SUBJECTIVE WELL-BEING IN POLAND

*An evaluation of the level of general satisfaction* is the most often applied measure of subjective quality of life (satisfaction). This indicator takes into consideration all aspects comprising quality of life that the tested person regards significant. Thus it takes into account the individual needs and expectations of the analysed person.

In the case of inhabitants of Poland aged at least 16 and over, 9% were very pleased with life and almost 65% declared to be pleased with life. About 20% were undecided. A little over 5% were dissatisfied and very dissatisfied persons.

The level of satisfaction is diversified socially because of the many features and factors, which are shown in Table 1 below.

*Table 1: Indicator of the life satisfaction (in % of persons aged 16 and over) (Quality of life, social capital..., 2013, p. 10).*

	<b>The highest indicator</b>	<b>Percentage of interest</b>	<b>The lowest indicator</b>	<b>Percentage of interest</b>
Age	16-24 years	83,6	75 and over	61,6
Education level	Master's and higher	86,7	Not more than college	64,9
Occupation	Managerial staff, high level office workers and managers	85,2	Unskilled workers	57,4
Employment status	Pupils, students	87,5	Pensioners (disability pension)	52,3
Financial situation	Persons with the best living conditions	88	Persons with the worst living conditions	43
Habitation	Towns with the number of inhabitants over 500 thousand	77	Towns with the number of inhabitants between 20-100 thousand	72,4

Research in Poland confirms that those that there are more often satisfied with their life are younger persons, pupils or students, and those with a higher education, working as managers and living in cities with over 500 thousand residents.

The least pleased persons are elderly people (75+ years), those working unskilled jobs, pensioners on disability pension, and residents of cities with a population from 20 up to 100

thousand. Analysis of individual aspects of life indicates that respondents are most pleased with family circumstances (16.6% of examined persons) and relations with other people (13.3%). The financial situation was assessed the most poorly. Every third person (approx. 34%) was satisfied with their financial situation, including income. It was the only aspect in which the group of people pleased with one's situation was smaller than the dissatisfied group (approx. 37%).

The two next indicators of subjective well-being are the indicator of a psychological sense of well-being and the indicator of malaise.

The definition of the composite indicator of a psychological sense of well-being assumes the occurrence of all 4 positive emotional states, thus the person feels at peace and in control most days, feels full of the life, has energy for action, feels happy throughout the month or almost the entire month.

In Poland in 2013, 37% of examined persons declared the composite indicator of a psychological sense of well-being, however the composite indicator of the malaise concerned 5.5% of the examined.

*Table 2: Indicator of a psychological sense of well-being (in % of persons aged 16 and over) (Quality of life, social capital..., 2013, p. 27).*

	<b>The highest indicator</b>	<b>%</b>	<b>The lowest indicator</b>	<b>%</b>
Age	16-24 years	26.3	75 and over	6.1
Education level	Bachelor's	15.9	Not more than college	11.9
Occupation	specialists	14.8	Unskilled workers	9
Employment status	Pupils, students	28.2	Agricultural senior citizens	5.4
Financial situation	Persons with the best living conditions	21.2	Persons with the worst living conditions	6.8
Habitation	Towns with the number of inhabitants between 20-100 thousand	15.4	Towns with the number of inhabitants over 500 thousand	12.2

Malaise includes the occurrence of the following: great irritation, deep depression, sadness or depression, exhaustion, and tiredness. Experiencing at least 3 out of 5 of the abovementioned states indicates malaise.

*Table 3: Indicator of psychological malaise (in % of persons aged 16 and over) ((Quality of life, social capital..., 2013, p. 27).*

	<b>The highest indicator</b>	<b>%</b>	<b>The lowest indicator</b>	<b>%</b>
Age	65-74 years	7.7	16-24 years	1.8
Education level	Bachelor's	6.2	Master's and higher	4.1
Occupation	Unskilled workers	7.6	Managerial staff, high level office workers and managers	3.5

Employment status	Pensioners (disability pension)	13.9	Pupils, students	1.8
Financial situation	Persons with the worst living conditions	13.5	Persons with the best living conditions	2.4
Habitation	Towns with the number of inhabitants over 500 thousand	5.8	Rural	4.5

Those with the lowest indicator included elderly people, retired pensioners, people with disabilities, and unskilled workers. A difficult financial situation as well as living in a larger city with a population over 500 thousand also support the accumulation of negative emotions.

## 5. SUBJECTIVE WELL-BEING IN EU COUNTRIES

Table 4 shows the ranking of European Union member states according to the life satisfaction index. The range is between 8.4 in Denmark and 5.5 in Bulgaria.

*Table 4: Indicators of life satisfaction inequality, by country (Quality of life in Europe..., 2013, p. 37)*

Country	Mean life satisfaction	Country	Mean life satisfaction	Country	Mean life satisfaction
RO	6.73	EE	6.28	PT	6.77
HU	5.77	CZ	6.43	IT	6.88
CY	7.16	PL	7.07	ES	7.47
BG	5.55	IE	7.39	LU	7.79
UK	7.29	SK	6.39	BE	7.38
DE	7.20	EL	6.16	SE	8.03
AT	7.66	MT	7.23	FI	8.08
LV	6.24	SI	6.95	NL	7.69
LT	6.70	FR	7.23	DK	8.37

Countries with the highest indicators of life satisfaction are Denmark, Finland, Sweden, and the Netherlands, i.e. social democratic countries. In all these countries, except for the Netherlands, the rate of life satisfaction exceeds 80%. The next country cluster is the corporatist group of countries (Luxembourg, Austria, Belgium, France, and Germany). All these countries have a life satisfaction index between 7.79 and 7.2. The liberal country cluster with Ireland and the United Kingdom has the same index 7.39-7.29. Among the countries in the Southern European cluster, Spain (7.47) has the highest life satisfaction index, then Malta (7.23), Cyprus (7.16), Italy (6.88), Portugal (6.77), and Greece (6.16). In the post-socialist corporatist cluster, Poland (7.07) has the highest life satisfaction index, then Slovenia (6.95), the Czech Republic (6.43), Slovakia (6.39), and Hungary (5.77). Next is the post-socialist liberal cluster with three countries, Lithuania (6.70), Estonia (6.28), and Latvia (6.24). The lowest life satisfaction index is in the 2007 accession cluster – Romania (6.73) and Bulgaria (5.55). The countries that stand out in the life satisfaction index within clusters are Greece in southern Europe, Hungary in the post-socialist corporatist cluster, and Bulgaria in the 2007 accession cluster.

Table 5: Characteristics associated with people who have low life satisfaction, and those who have high life satisfaction (*Quality of life in Europe...*, 2013, p. 40-42)

	high life satisfaction	%	low life satisfaction	%
Age	Aged 65 or over		Aged between 35 and 49	
Education level	Tertiary education	20.6		11.8
Employment status	At work as employee or employer/self-employed	42.2	Unemployed 12 months or more	12.5
Income and material deprivation	Being in the highest income quartile	59.1	Being in the lowest income quartile	0.20
Accommodation	Own accommodation (with mortgage)	21.6	Tenant in social housing	19.3

When comparing the life satisfaction index in all European Union countries and Poland, we can observe one main difference. In EU countries, the highest level of satisfaction is typical for people aged 65 and over. In Poland, this group is characterised by a low level of satisfaction. In Poland, the highest level of satisfaction is typical for the group aged 16-24 years. The remaining factors are at a similar level as in European Union countries. The level of satisfaction with life in society is enriched by analysis of satisfaction with its individual aspects. Human relationships and family situation were sources of the greatest satisfaction (social, friendly). The lowest satisfaction became apparent at the evaluation of satisfaction with one's financial situation (including income). In this case, the number of dissatisfied people exceeded the number of pleased people. The perceived level of satisfaction is affected by many factors, some of which are difficult to measure statistically (or not measurable in practice), resulting from cultural or psychological conditioning, for example. The main determinants of low well-being are unemployment, disabilities, housing problems, low education level, and a low level of income. In Poland, there was a strong and significant impact of poverty on the appearance of mental health problems. Unemployment and social isolation were the factors contributing to its occurrence. In European Union countries, people with a low level of well-being are usually separated or divorced. This, however, does not affect well-being in Poland. A more detailed analysis revealed some surprising results (*Quality of life in Europe: Subjective well-being, 2013*).

- Social aspects of deprivation, such as not being able to invite guests over, were the most important in the index of deprivation created using the EQLS.
- The most important detrimental impact of housing on life satisfaction was not feeling secure that one could stay in one's house.
- Temporary employment contracts of less than 12 months were particularly detrimental to life satisfaction, while those 12 months or over had no significant negative impact.
- Face-to-face contact with friends had a strong impact on well-being, while indirect contact (by phone or email) had almost no positive impact.
- When other factors are controlled for, people in rural areas have higher well-being than those in urban areas.

## 6. CONCLUSION

The highest well-being is in the social democratic countries of northern Europe (Finland, Denmark, Sweden, and the Netherlands). The lowest well-being is in Bulgaria, Greece, Hungary, Latvia, and Romania. Poland is in the middle of European Union countries. In fact, Poland is in first place from the post-socialist corporatist countries.

After comparing groups of people that have a low level of well-being, the few groups of people with consistently low well-being are: unemployed people; people who are separated or

divorced; people with lower levels of education; people with illnesses or disabilities that limit their daily activities; and people in the bottom income quartile. A similar situation is in Poland and the other European Union countries.

Also, Europeans aged 35–50 have the lowest well-being, with both older and younger people enjoying higher levels. This situation is completely different in Poland where people aged 75 and over have the lowest well-being.

The data also indicate that people living in rural areas have higher well-being than people living in cities.

## LITERATURE

1. Gasper, D. (2007). Uncounted or illusory blessings? Competing responses to the Easterlin, Easterbrook and Schwartz paradoxes of well-being, *Journal of International Development*, Vol. 19, No. 4, 2007, pp. 473–92.
2. General for Employment, Social Affairs and Inclusion, January 2011, p. 9.
3. Huppert, F.A. (2008). State-of-Science Review: Psychological Wellbeing: Evidence regarding its Causes & Consequences, Foresight-SR-X2 v5 stage 6, *Mental Capital and Mental Wellbeing*, Version 9 July.
4. *OECD guidelines on measuring subjective well-being*, OECD Publishing, OECD 2013, p. 34-35. <http://dx.doi.org/10.1787/9789264191655-en>
5. *Quality of life in Europe: Subjective well-being* (2013). 3rd European Quality of Life Survey, Luxembourg: Publications Office of the European Union.
6. *Quality of life in Poland*. (2014). Central Statistical Office, (p. 6-9), Warsaw.
7. *Quality of life indicators* online Eurostat publication, [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Quality\\_of\\_life\\_indicators\\_-\\_measuring\\_quality\\_of\\_life](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Quality_of_life_indicators_-_measuring_quality_of_life)
8. *Quality of life, social capital, poverty and social exclusion in Poland*. (2013). Central Statistical Office, p. 27, Warsaw.
9. Stiglitz J., Sen A., Fitoussi J. P. (2009). *Report by the Commission on the Measurement of Economic Performance and Social Progress* (p. 41), <http://www.stiglitz-sen-fitoussi.fr/en/index.htm>;
10. *Subjective well-being and social policy* (2010), Edited by Simon Chapple, European Commission Directorate.

## THE FORECASTING ANALYSIS OF EUR/CHF EXCHANGE RATE VOLATILITY IN ALBANIAN MARKET

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### ABSTRACT

*This paper aims the estimation and forecasting of EUR/CHF exchange rate volatility in short term period in Albanian market, being that Euro is the mostly used currency in financial and commercial transactions and furthermore together with Swiss franc are considered as safe currencies with a probabilistic volatility distribution statistically interesting. Precisely the latter, represents a continuous concern for the economic agents dealing with the above mentioned exchange risk, hence the measurement of its volatility helps them in the assessment and maintenance of capital needed for coverage purposes. Meanwhile is observed an increasing export trend particularly during 2014 toward Italy, Spain, Germany, Greece and Switzerland where the goods are sold in EUR and CHF contemporary with the external debt issued in Euro. Under these circumstances, the financial time series dynamic models such as ARMA (1;1), ARCH (1) and GARCH (1;1) are used to estimate the EUR/CHF exchange rate volatility in short term period. The last one, which at 95% confidence level displays satisfactory statistical parameters in confront of the others in terms of normal residuals distribution is also used to forecast EUR/CHF exchange rate during 2015 in correspondence of moving average method based on latest 252 exchange rate values. The comparison of EUR/CHF exchange rate forecasted data through GARCH (1;1) model with the current ones demonstrated the robustness of the latter as the forecasted data didn't exceeded the established limit at the confidence level taken into consideration. Therefore, the research in question suggests to the economic agents dealing with these kinds of transactions the implementation of GARCH models for the estimation and forecasting of EUR/CHF exchange rate volatility in the short term period, necessary for risk management purposes.*

**Keywords:** *dynamic models, exchange rate volatility forecasting, financial time series.*

### 1. INTRODUCTION

The present research aims to identify the functional form of EUR/CHF exchange rate volatility in Albanian market, necessary to economic agents exposed to the above mentioned exchange risk not only for its forecasting in short term period but mainly for the assessment and maintenance of economic capital for coverage purposes. Namely, by considering EUR/CHF exchange rate and its variance statistical behavior (see Fig.1&2), leads to the understanding that precisely the last one makes the issue interesting in the market in question. What from the other side, it has also frequently contributed in the depreciation of domestic currency (Albanian Lek) against foreign currencies mainly used in the country. Correspondently, worth mentioned that domestic currency has been significantly depreciated against foreign currencies due to: trade



liberalization, implementation of flexible exchange rate regime and import volume growth as per primary services and goods necessity (in 1992); political/social issues followed consequently by the financial/economical instability (in 1997); the entrance of common currency of European Union (EURO) and the significant increase of imports and remittances in the country in this currency (in 2001-2002); the continuous depreciation of domestic currency against USD has maintained the same trend due to country's economic slowdown (during 2012-2014), at the end of January 2015 as per CHF overestimation against EUR in the financial markets.

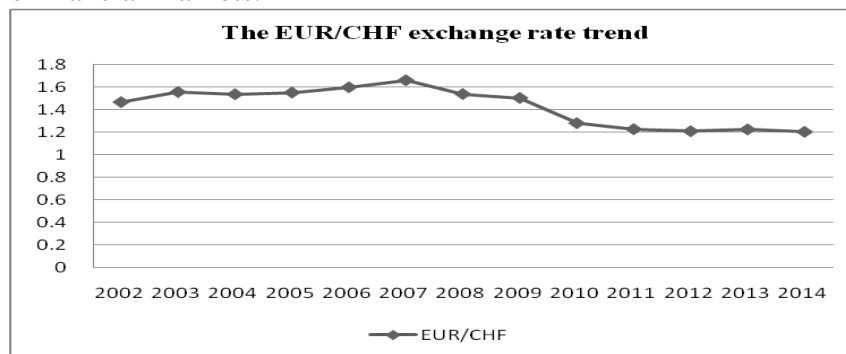


Figure.1: The EUR/CHF exchange rate trend (2002-2014)

Source: Bank of Albania data, author's elaboration.

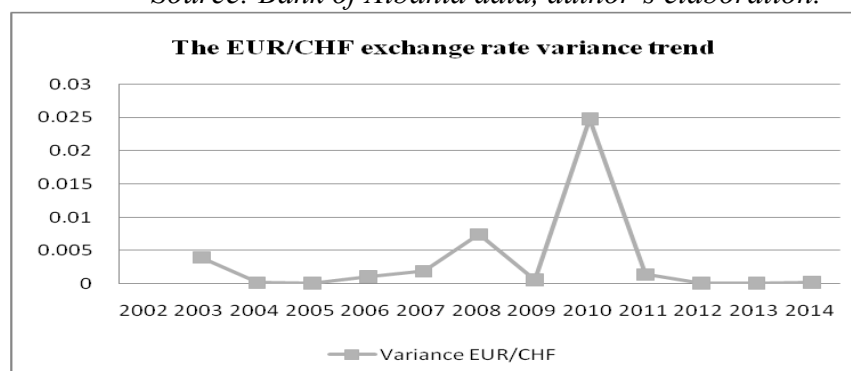


Figure.2: The EUR/CHF exchange rate variance trend (2002-2014)

Source: Bank of Albania data, author's elaboration.

Meanwhile is observed an increasing export trend particularly during 2014 toward Italy, Spain, Germany, Greece, and Switzerland where the goods are sold in EUR and CHF. The same results are obtained if is considered the EUR/CHF first differences time series (see Fig.3) which directly leads to the understanding of domestic currency depreciation/overestimation against both currencies by contributing in a certain way in the analysis in question and orienting the study into the financial time series dynamic models. Therefore the paper is developed through the raise of three hypotheses such as: H1-The ARMA (1;1) model can accurately estimate EUR/CHF exchange rate volatility in short term period; H2-The ARCH (1;1) model can accurately estimate EUR/CHF exchange rate volatility in short term period; H3-The GARCH (1;1) model can accurately estimate EUR/CHF exchange rate volatility in short term period in Albanian market. But in each single case the hypothesis estimated results are considered at 95% confidence level. And by mostly referring to the normality of respective residuals distribution GARCH (1;1) model results superior than the others that's why it is used to estimate the EUR/CHF exchange rate volatility in short term period and hereinafter for respective Value at Risk (VaR) calculation.

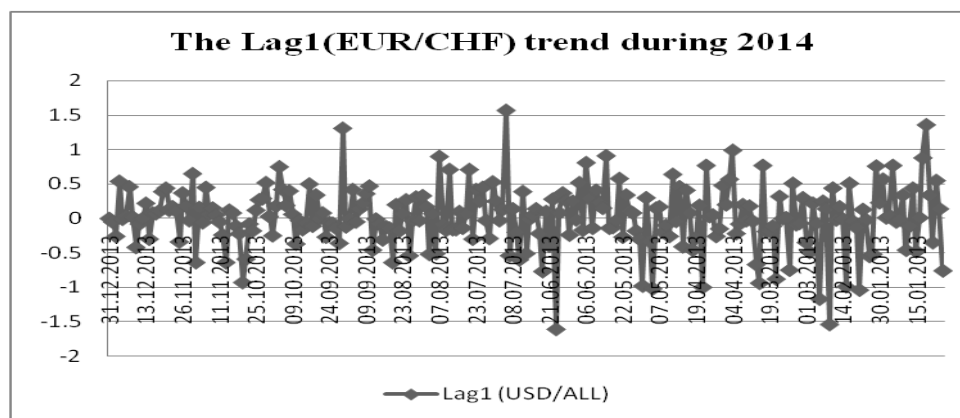


Figure.3: The EUR/CHF exchange rate first differences trend during 2014

Source: Bank of Albania data, author's elaboration.

## 2. THEORETICAL CONTEXT

In general, the literature presents disputed empirical results regarding the impact of various factors on exchange rate volatility, but how is addressed the exchange rate volatility modeling issue on it? There are also many studies that deal with exchange rate volatility modeling, although most of them are focused mainly on finding the volatility sources for an appropriate market risk estimation and management according to (Marrison, 2002, pp. 130-145). And precisely for this reason they differ on the way how handle the exchange rate volatility issue. Especially the latter can be treated in two large groups. The first group pertains to the studies that use different standard deviation errors' modifications in autoregressive models while in the second one are classified the models that treat auto-correlated errors attitude with varying variance, the also called Autoregressive Conditional Heteroskedastic volatility models (ARCH). The latest was firstly developed from (Engle, 1982, pp. 987-1007) and (Bollerslev, 1986, pp. 307-327) and further explored from (Giot and Laurent, 2001, pp. 1273-1296). As well as further modifications of ARCH approach can be found in (Orlowski, 2004, pp. 20-25). While, (Belke and Setzer, 2003, pp. 153-175) belong to the first group of researchers as they studied exchange rate volatility impact in labor market of Visegrad. From the other side (Baum et al., 2004, pp. 1-23) by analyzing the impact of exchange rate volatility on bilateral exports volume applied a GARCH-type (Generalized Autoregressive Conditional Heteroskedastic volatility) model through which were made respective volatility measurements. Specifically, here for the exchange rate volatility modeling is used TARCH (an ARCH model with consistent autoregressive terms) model even it assumes that negative information distort the market as evidenced from (Zakoian, 1994, pp. 931-955). And in fact, through TARCH models are analyzed the current developments in exchange rate volatility in Czech Republic, Poland, Hungary and Slovakia. The authors suggest it as they can't distinguish any difference between exchange rates and capital time series behavior. However, the literature shows another model which can be used in these cases and is a first order GARCH model. In addition other GARCH-type models were further developed from (Sentana, 1995, pp. 639-661) trying to detect also variance structural breaks (they demonstrate irregularities in financial time series related to heteroskedasticity problems in the data analyzed) and are usually present in financial time series on behalf of (Bali and Guirguis, 2007, pp. 332-346). Contemporary some simpler models like ARMA (which represents an autoregressive moving average process) are equally used to analyze and forecast exchange rate time series in compliance with (Box et al., 2008, pp. 21-45) and (Brooks, 2002, pp. 27-38) proposed methodologies. Furthermore researchers, referring to time series characteristics initiated respective analysis from the best model (in statistical terms) that explains exchange rate volatility in order to forecast future values by keeping in mind the evidences of (Brooks, 1997, pp. 125-145) and (Hsieh, 1989, pp. 329-368) in this context. Also

according to (Engle, 2001, pp. 157-168), (Dowd, 2002, pp. 3-33), (Žiković, 2008, pp. 23-33), (Erdemlioglu, Laurent and Neely, 2012, pp. 20-34) and (Duffie and Pan, 1997, pp. 7-49) these models represent the best methodology in measuring exchange rate volatility or respective returns. By also giving the option of the largest loss expected calculation under a certain probability level during a given time period (depending on the exposure) for those entities that are exposed to a certain position and consequently are directly affected by exchange rate risk as confirmed from (Marcucci, 2005, pp. 1-53).

### 3. EXPLORING THE FINANCIAL SERIES DYNAMIC MODELS

Referring to EUR/CHF exchange rate financial time series (see Fig.4) can be evidenced its heteroskedastic distribution (see Fig.5) and consequently it technically reserves the right to be focus on the financial time series dynamic models for the estimation of EUR/CHF exchange rate volatility and further for its forecasting in short time period. Because these kind of models estimate the differential equations containing the stochastic component (which is missing due to leptokurtic functional form that the financial time series in question presents) and in this case are elaborated through gretl (1.9.8) version. Another important element observed in the EUR/CHF exchange rate financial time series trend is the asymmetry of distribution which simultaneously confirms also the autocorrelation of respective data. Hence, by strictly referring to these characteristics, generally, two of the functional forms mostly used pertaining to the previously mentioned models are:-autoregressive models (AR);-moving average models (MA). And the (Box-Jenkins, 1970, referred by Box, Jenkins, and Reinsel, 1994 pp. 85) methodology, combines this models in order to build the extended models ARMA (*autoregressive moving average models*).

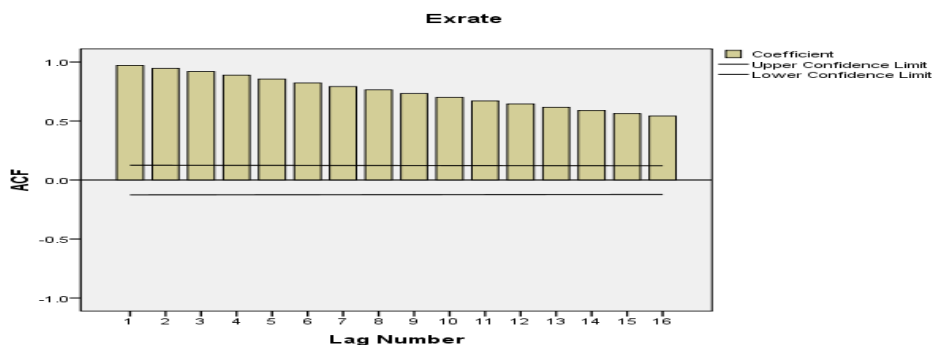


Figure.4:Lack of stochastic component in the EUR/CHF exchange rate trend during 2014  
Source: Bank of Albania data, author's elaboration.

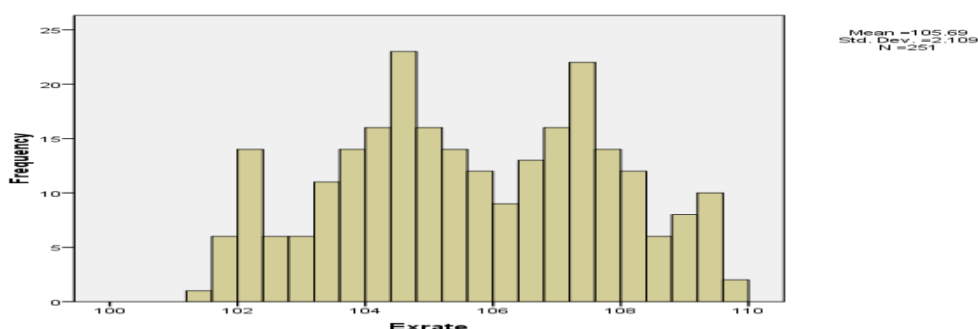


Figure.5:The EUR/CHF exchange rate frequency distribution during 2014  
Source: Bank of Albania data, author's elaboration.

As they are used to describe the non-stationary of a financial time series, but in order to implement them in the time series in question, must be avoided its trend component and the last one is possible through the application of natural logarithm on EUR/CHF exchange rate financial time series first differences. The above transformation is used in order to verify the short memory of EUR/CHF exchange rate financial time series which simultaneously helps in a better understanding of respective behavior by implementing some simple financial time series models. Precisely for this purpose, is used the daily EUR/CHF financial time series for the entire year 2014.

### 3.1. The research hypotheses

H1-The ARMA (1;1) model can accurately estimate EUR/CHF exchange rate volatility in short term period; H2-The ARCH (1;1) model can accurately estimate EUR/CHF exchange rate volatility in short term period; H3-The GARCH (1;1) model can accurately estimate EUR/CHF exchange rate volatility in short term period in Albanian market.

### 3.2. The ARMA model

The autoregressive process (AR and MA) as can be understand for the name itself, explains the EUR/CHF exchange rate financial time series data and residuals in correspondence of its previous data through a linear autoregressive order and precisely this order determines the entire model order thus, in these cases the model data explain better than anyone else themselves. But as described in literature, must be estimated the persistence of these autocorrelations (as displayed in Fig.6) before applying it. As evidenced can be confirmed the first order autocorrelation of EUR/CHF exchange rate data at 95% confidence level and the same situation persists to the residuals autocorrelation (refer to Fig.7&8). By this way, is deemed necessary to implement ARMA (1;1) models (refer to Table.1 data) for the forecasting of EUR/CHF exchange rate volatility even why the previous results don't confirm it. So, the **hypothesis H1 of the study is rejected**. And in order to prove the ARMA (1;1) model validity, it must be refer to respective residuals distribution and compare it within normal ones.

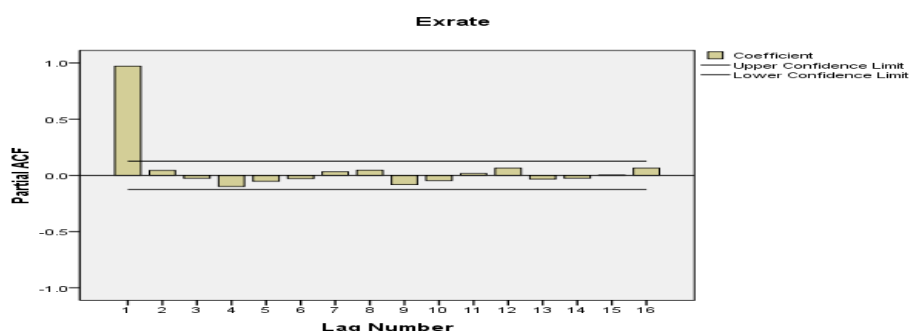


Figure.6: The EUR/CHF exchange rate data correlogram  
Source: Bank of Albania data, author's elaboration

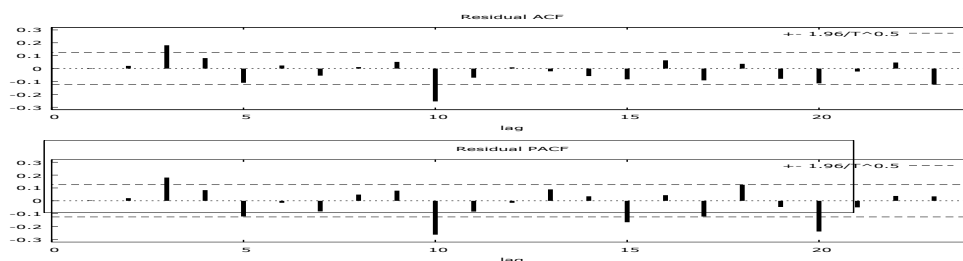


Figure.7: The ARMA (1;1) model residuals correlogram results  
Source: Bank of Albania data, author's elaboration.

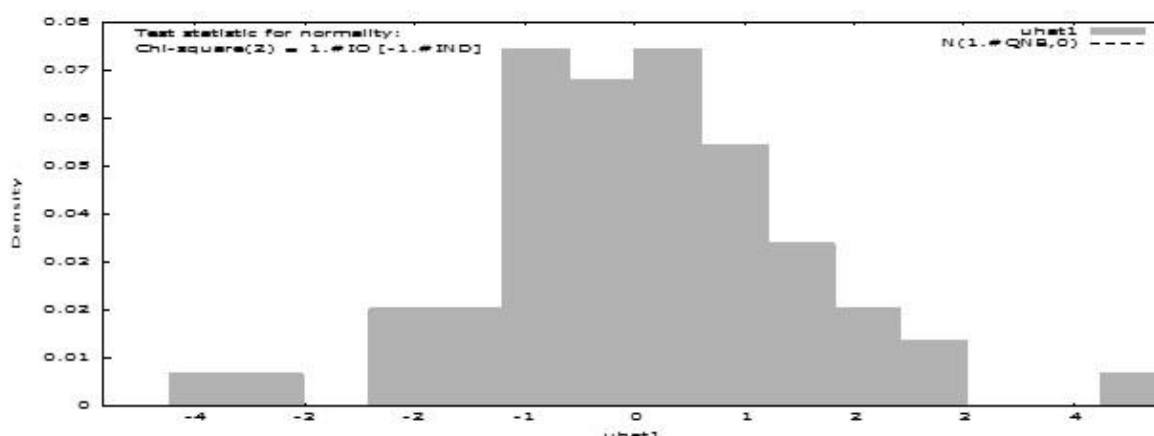


Figure.8: The ARMA (1;1) model residuals' normality test results  
Source: Bank of Albania data, author's elaboration.

Table 1: ARIMA, using observations 2014/01/01-2014/12/31 ( $T = 251$ )

Estimated using Kalman filter (exact ML)

Dependent variable: EUR/CHF

Standard errors based on Hessian

	coefficient	std. error	z	p-value
const	0.106745	0.192539	0.5544	0.5793
phi_1	0.883882	0.0338065	26.15	1.11e-150 ***
Phi_1	-0.441638	0.0599420	-7.368	1.74e-013 ***
theta_1	-0.0242688	0.0706410	-0.3436	0.7312

Mean dependent var 0.100528 S.D. dependent var 0.985289

Mean of innovations 0.000082 S.D. of innovations 0.531432

Log-likelihood -194.6098 Akaike criterion 399.2195

Schwarz criterion 416.7462 Hannan-Quinn 406.2767

The results obtained by this way, demonstrate that the previously mentioned residuals aren't normally distributed and furthermore do not fit with the actual ones (see Fig.9). As far as can be understood, ARMA (1;1) model residuals' are significantly distributed in the extreme values. And this ascertains that other models should be explored in order to accurately estimate and forecast EUR/CHF exchange rate volatility in Albanian market.

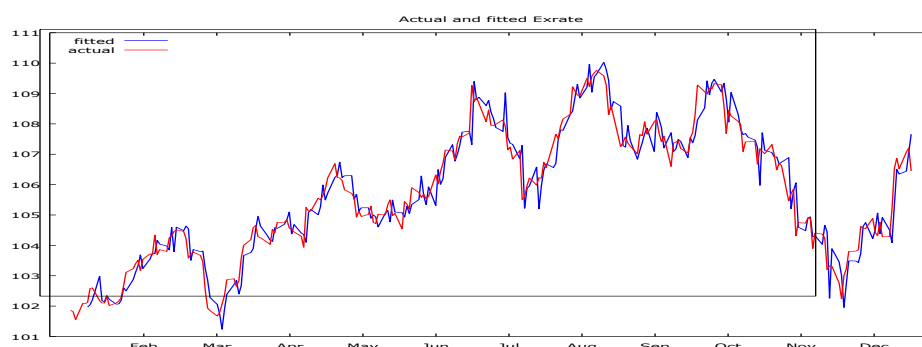


Figure.9: The ARMA (1;1) residuals' versus actual ones  
Source: Bank of Albania data, author's elaboration.

### 3.3. The ARCH model

As previously mentioned is the phenomenon of heteroskedasticity manifested in EUR/CHF exchange rate financial time series data that negatively impacts on its behavior which is actually transformed in its primarily risk unit. In order to particularly include in the analysis this phenomenon, another model category must be explored, precisely it should be dealt with that category which is able to directly treat the heteroskedasticity of financial time series. In fact these ones have gained a special interest in the academic and applicative field. Namely, (Engle, 1982, p. 991) paved the way to the detailed analysis that exists today over the models called ARCH (*Autoregressive Conditional Heteroskedasticity models*). Subsequently, it can be implemented ARCH (1) model by referring to H2 hypothesis of the study in order to estimate the EUR/CHF volatility in short term period (respective results are presented in Table.2). The results demonstrate that model coefficients are all statistically significant at 95% confidence level.

Table 2: ARCH, using observations 2014/01/01-2014/12/31 ( $T = 251$ )

Dependent variable: EUR/CHF  
Standard errors based on Hessian

	coefficient	std. error	z	p-value	
const	105.342	0.220175	478.4	0.0000	***
alpha(0)	0.176721	0.0796777	2.218	0.0266	**
alpha(1)	0.983003	0.124065	7.923	2.31e-015	***
Mean dependent var	105.6884	S.D. dependent var	2.108586		
Log-likelihood	-465.8988	Akaike criterion	939.7976		
Schwarz criterion	953.8994	Hannan-Quinn	945.4725		

While by referring to the specification test, the criterions of Akaike and Schwarz are significant and this leads to the understanding that ARCH (1) model can't accurately estimate USD/ALL exchange rate volatility **by rejecting also the H2 hypothesis of the study**. Same results are obtained from residuals full and partial autocorrelation as well as from normality test (see Fig.10&11). This from the other side reconfirms the presence of heteroskedasticity phenomenon in the financial time series in question. That's why additional dynamic financial time series models are explored in following.

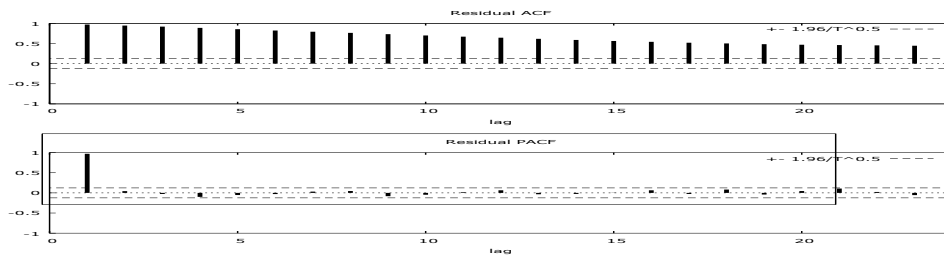


Figure.10: The ARCH(1) residuals full and partial autocorrelation data  
Source: Bank of Albania data, author's elaboration

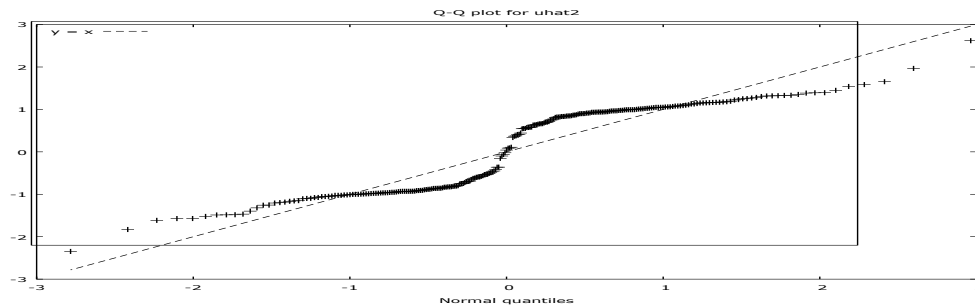


Figure.11: The ARCH(1) residuals quantiles distribution  
Source: Bank of Albania data, author's elaboration

### 3.4 The GARCH model

The latter empirical studies pertaining to heteroskedastic autoregressive conditional variance proposed from (Bollerslev, 1986 p. 315), have significantly improved the ones proposed from (Engle, 1982, p. 991). By this way, born and further developed GARCH (*Generalized Autoregressive Conditional Heteroskedasticity*) models. In this process, called GARCH of the (p; q) order the conditional variance doesn't represent only the autocorrelation function of squared USD/ALL exchange rate financial time series variables (p-variables) but also to the respective squared residuals (q-variables). Differently said, these kinds of models correspond to squared ARMA models. By this way, trying to estimate the validity of H3 hypothesis of the study is developed GARCH (1;1) model (see Table.3 data).

Table 3: GARCH, using observations 2014/01/01-2014/12/31 ( $T = 251$ )

Dependent variable: EUR/CHF				
Standard errors based on Hessian				
	Coefficient	Std. Error	z	p-value
alpha(0)	283.347	24457.1	0.0116	0.0076
alpha(1)	0.926364	9.01156	0.1028	0.04812
beta(1)	0.0483497	9.2615	0.0052	0.99583
Mean dependent var	105.6884	S.D. dependent var	2.108586	
Log-likelihood	-1525.894	Akaike criterion	59.787	
Schwarz criterion	73.889	Hannan-Quinn	3065.462	

Two of latest coefficients are statistically significant at 95% confidence level, but the specification tests results aren't reduce in confront of ARCH (1) model. From the other side the residuals' normality distribution results conduct to an identical and consequently to a symmetrical data distribution by concluding in the H3 hypothesis acceptance.

### 3.4.1 The forecasting of USD/ALL exchange rate volatility in short term period through GARCH(1;1) model

The estimations done regarding USD/ALL exchange rate volatility through GARCH (1;1) model demonstrate that the last one can accurately do it, but in any case, beyond the statistical estimations in order to confirm the acceptance of H3 hypothesis of the study through the forecasting of financial time series in question in short term period. More specifically, for this purpose is implemented the moving window method for the short time period forecasting of EUR/CHF exchange rate data (within a day period) for the entire year 2015 in correspondence of latest 252 exchange rate data pertaining to 2014 as presented in the Fig.12.

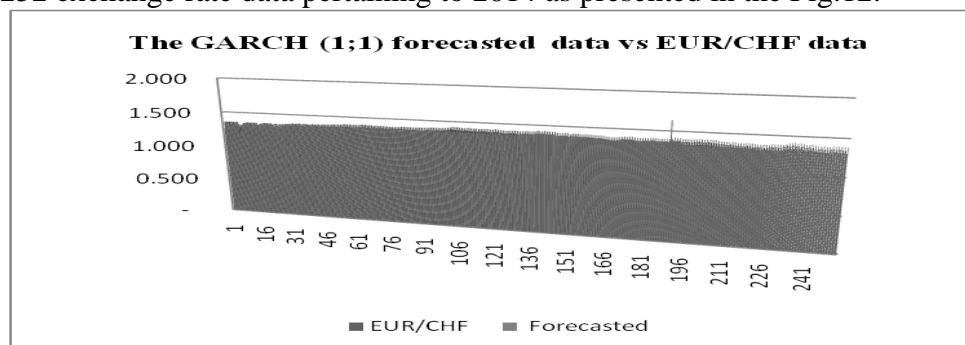


Figure.12: The USD/ALL exchange rate forecasted data through GARCH (1;1)  
Source: Bank of Albania data, author's elaboration.

## 4. CONSLUSION

The detailed analysis of EUR/CHF exchange rate volatility in Albanian market demonstrated that no one of simple the models described as above such as ARMA (1;1) and ARCH (1) weren't capable to accurately estimate its volatility. The forecasted data have exceeded the minimal established thresholds 2 times and never the maximal (see Fig.13). **So it can be concluded in the acceptance of H3 hypothesis of the study.**

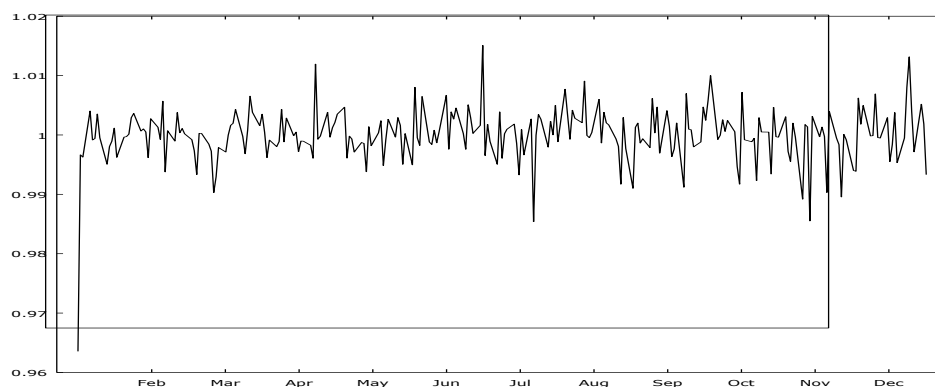


Figure.13: The distribution of USD/ALL exchange rate data without its trend component  
Source: Bank of Albania data, author's elaboration.

By this way, in order to analyze and better manage EUR/CHF exchange rate volatility the GARCH (1;1) model is used. Furthermore it can also be implemented for the EUR/CHF exchange rate returns and economic capital estimation for coverage purposes (refer to Fig.14).



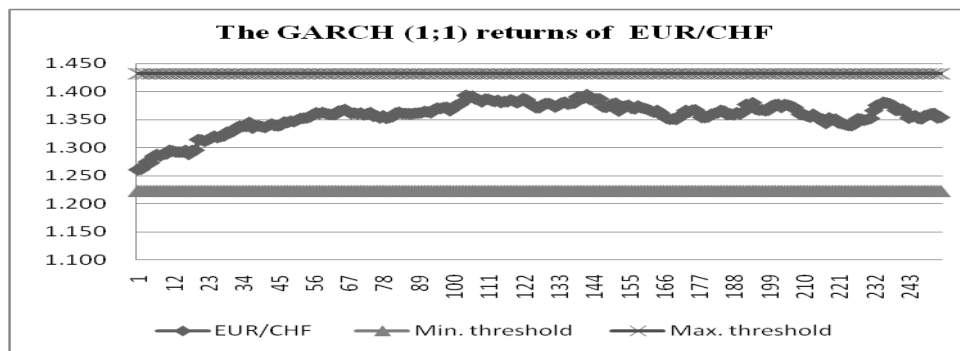


Figure.14: The EUR/CHF exchange rate return data estimated through GARCH (1;1)  
Source: Bank of Albania data, author's elaboration.

Hence, depending on the circumstances the exploration of GARCH models from the rational economic agents operating in the country and exposed to the above mentioned fluctuations makes possible even respective Value at Risk calculation for a certain time period under a given confidence level what simultaneously positively contributes in the exchange risk management.

## LITERATURE

1. Bali, R, & Guirguis, H, (2007). In Editor H. Beladi & C.R. Chen (no.16). International Review of Economics & Finance : Extreme observations and non-normality in ARCH and GARCH. (p. 332-346). USA: Elsevier.
2. Baum, C, Caglayan, M, & Ozkan, N, (2004). In Editor B. Rossi 19(1), Journal of Applied Econometrics : Nonlinear effects of exchange rate volatility on the volume of bilateral exports" (p. 1-23). Spain : John Wiley & Sons Ltd.
3. Belke, A, & Setzer, R, (2003), In Editor G. Fandel 36(2). ", Economics of Planning : Exchange rate variability and labor market performance in the Visegrad countries. (p.153-175). Great Britain: Springer.
4. Bollerslev, T, (1986), In Editor Y. Ait-Sahalia, J. Fan, H. Hong, O. Linton (no.31). Journal of Econometrics : Generalized autoregressive conditional heteroskedasticity. (p. 307-327). USA : Elsevier.
5. Brooks, C. (2002). Introductory Econometrics for Finance. Cambridge: Cambridge University Press.
6. Brooks, C, (1997), In Editor R. Hyndman (no.16 ). Journal of forecasting : Linear and non-linear (non-) forecastability of highfrequency exchange rates. (p. 125-145). USA : Elsevier.
7. Box, G , Jenkins G, and Reinsel G. (2008). Time Series Analysis: Forecasting and Control. (4th Ed). New Jersey :John Wiley and Sons.
8. Box, G, Jenkins, G, and Reinsel, G. (1994). Time Series Analysis: Forecasting and Control. (3rd Edition). San Francisco: Prentice Hall.
9. Dowd, K, (2002). An introduction to market risk measurement. Chichester : John Wiley & Sons Ltd.
10. Duffie, D, & Pan J, (1997). In Editor S. Figlewski (V.4). Journal of Derivatives : An Overview of Value at Risk. (p.7-49). USA : IJJ.
11. Engle, R, (1982). In Editor J. Sobel 50(4). Econometrica : Autoregressive Conditional Heteroskedasticity with the Estimates of the Variance of United Kindom Inflation. (p. 987–1007). USA : John Wiley & Sons Inc.

12. Erdemlioglu, D, Laurent, S, & Neely, C, (2012). Econometric modeling of exchange rate volatility and jumps. (No. A 12-2012). St Louis : Federal Reserve Bank of St. Louis Working Papers.
13. Engle, R, (2001). In Editor E. Moretti (no.12). Journal of economic perspectives: GARCH 101: The use of ARCH/GARCH models in applied econometrics. ( p.157-168). USA : AEA Publications.
14. Giot, P, & Laurent, S, (2001), In Editor C. Alexander, G. Bekaert (no.26). Journal of Banking and Finance:Modelling Daily Value-at-Risk Using Realized and ARCH-Type Models. (p.1273-1296). USA : Elsevier.
15. Hsieh, D, (1989). In Editor M. Philipson (no.62). Journal of Business : Testing for nonlinear dependence in daily foreign exchange rates. (p. 329–68). USA : University of Chicago.
16. Marcucci, J, (2005). In Editor B. Mizrahi 9(4). Studies in Nonlinear Dynamics and Econometrics : Forecasting Stock Market Volatility with Regime- Switching GARCH Models. (p. 1-53). Germany : Walter de Gruyter GmbH.
17. Marrison, C, (2002). The Fundamentals of Risk Measurement. New York : McGraw Hill.
18. Orlowski, L, (2004). Exchange rate risk and convergence to the euro. (No. B 25-2004). Bruxelles : ZEI working paper.
19. Sentana, E, (1995). In Editor K. Storesletten (no.62). Review of Economic Studies : Quadratic ARCH models: a potential re-interpretation of ARCH models. (p. 639–661). Sweden: Stockholm University.
20. Zakoian, J, (1994). In Editor J. Bullard, H. Dawid, X. He, T. Lubik, C. Otrok, B. Ravikumar (no.15). Journal of Economic Dynamics and Control : Threshold Heteroskedasticity Models. (p. 931-955). USA : Elsevier.
21. Žiković, S, (2008). In Editor A. Efendic, V. Babic-Hodovic, A. Sunje 3(1). South East European Journal of Economics and Business : Calculating VaR in EU Candidate States. (p. 23-33). Bosna: University of Sarajevo.

## DRUGS CONSUMPTION IN KOSOVO AND IMPACT IN THE SOCIAL LIFE OF POPULATION

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### ABSTRACT

*Drug consumption in Kosovo is a research analysis published by Kosovo Medicines Agency where it is described for all the drugs the consumption during three year period 2011-2013 based on WHO methodology.*

*The analysis is based on two main indicators which are consumption according to Defined Daily Doses per inhabitant per day (DID) and in monetary value. As it has a three year reference it is also a very good analysis for comparing the trend of prescribing from the health professionals.*

*Kosovo is one of the poorest countries in Europe with only 2.6% of GDP dedicated for health and with the reports showing that in 2010-2013 a significant percentage of drugs were from the grey market. On the other hand the analysis of the drug consumption for 2014 in Kosovo shows that there is an increase of the consumption while there was no epidemics or increase in the significant numbers of the morbidity.*

*This paper analyses factors that influence this increase in the consumption and the impact in the social life of the population in Kosovo in the time period 2011- 2014.*

*The main results of this analysis show that changes in legislation play a crucial role in this increase because the registration procedures are facilitated and also the import license procedures are facilitated as well which in turn made the increase of the imports of the legal chain hence decreasing significantly the illegal chain. This in turn is changing also the perception of the population for the Kosovo Medicines Agency while there is a gain of trust with the belief of the increase of the quality, efficacy and safety of medicines as well.*

**Keywords:** ATC classification, DDD, DID; Drug Consumption

### 1. INTRODUCTION

Many countries now for many years from their respective agencies publish the drug consumption data which are used widely for the decision making processes of many stakeholders starting from policy makers, professional organizations, doctors, agencies and also industry for their business plans.

Drug consumption in Kosovo for years 2011-2013, drugs that are used for cardiovascular system is part of the publication that is made by Kosovo Medicines Agency in 2014 which includes all the drug classes that have been imported in Kosovo or produced by local manufacturers in this time period. Due to the fact that the cardiovascular group of drugs are the most used among other groups according to the results based on DID (Defined Daily Dose per Inhabitant per day), is a reason of further analysis of this group detailed with the analysis and results in this paper.

The data analyzed derived from wholesalers and the necessity to collect these data was problematic since it had to everything be done manually due to the lack of electronic system for reporting from wholesalers.

Pharmaceutical Sector in Kosovo has two main parts as one is the private sector where the dispensing is made for outpatients in 519 retail pharmacies all over Kosovo (KMA 2015) and the public sector which has to do with hospitals which are supplied with drugs from Essential List of Medicines which are procured through a central procurement of the Ministry of Health. These drugs are only for inpatients use while there is still not established the Health Insurance Fund. Patients pay for their drugs from the pocket money, there is no reimbursement (except for inpatients) and the unemployment rate is 30.2% according to the Statistical Agency of Kosovo.

Due to the fact that from all drug classes categorized according to ATC classification model of WHO the most used drugs in Kosovo in a three year period are cardiovascular drugs (C) with 110.05 DID or 34% from all 14 drug groups in 2013 respectively 293.55 DID or 33% from all 14 drug groups in three year period (2011-2013) it will be this ATC class that will further be analyzed in this paper. These numbers for drug consumption of cardiovascular drugs in Kosovo are based on 85 drugs according to their INN names or 417 different types of drugs according to their brand names that have Marketing Authorization in Kosovo and which are manufactured by 89 manufacturers worldwide.

## 2. METHODOLOGY

A total of 85 drugs of the group C of ATC are analyzed according to their INN names or which represent 417 different types of drugs according to their brand names that have Marketing Authorization obtained from Kosovo Medicines Agency and which are manufactured by 89 manufacturers worldwide. Data were collected from wholesalers in the time period 2011-2013. As this was the first official publication by Kosovo Medicines Agency (KMA) this was the reason of analyzing it for three year period in order to get also the perception of the trend of drug use (Jakupi A. 2014)

Methodology used is based on ATC classification of drugs. According to WHO in the Anatomical Therapeutic Chemical (ATC) classification system, the active substances are divided into different groups according to the organ or system on which they act and their therapeutic, pharmacological and chemical properties, furthermore explaining that drugs are divided into fourteen main groups (1st level), with pharmacological/therapeutic subgroups (2nd level), the 3rd and 4th levels are chemical/pharmacological/therapeutic subgroups and the 5th level is the chemical substance.

Furthermore were introduced DDD (Defined Daily Dose – as the average maintenance daily dose of a product) and DID (Defined Daily Dose of a product per Inhabitant per Day) which are used for drug utilization studies and also that are used in the analysis for this paper.

The detailed analysis of data included also different indicators needed for final results. These including the total quantity in mg of substance, defined daily dose of the product, time period of the consumption that has been made and population in total.

Data were collected in Excel format due to the lack of other forms of system which would made it easier for analysis. Initially entering it from hardcopy to excel and then validating it and further analyzing according to the desired indicators.

### 3. RESULTS

The drugs of the group C consumed in time period 2011-2013 are the mostly used in Kosovo comprising 34-35% of total consumption from all 14 drug classes of ATC classification. According to ATC level 2, as presented in table 1 the subgroup C09 makes 149.72 DID overall 51% of the consumption among all C level 2 subclass. C09 represents agents acting on the renin angiotensin system.

*Table 1. DID for drug consumption of group C according to ATC level 2*

Row Labels ATC	2011 DID	2012	2013	Grand Total
C	86.36	97.13	110.06	293.55
C01	3.96	2.27	1.30	7.53
C02	0.75	0.75	0.73	2.24
C03	8.39	14.40	19.26	42.04
C04	2.52	1.10	1.55	5.17
C05	0.13	0.20	1.59	1.93
C07	8.55	7.89	10.18	26.62
C08	12.34	9.75	11.39	33.48
C09	43.97	52.05	53.70	149.72
C10	5.76	8.70	10.36	24.82
Grand Total	86.36	97.13	110.06	293.55

Comparing these results with the consumption of the same drug class in Norway it is seen similarly that group C09 is the mostly consumed also in Norway in 2013 but with 647.4 DID which is 12 times higher use of agents acting on the renin angiotensin system than in 2013 in Kosovo. Or in terms of group C comparing it for year 2013 in Kosovo with 110.06 DID vs. 1595.8 DID in 2013 in Norway. Another interesting fact is that C10 (lipid modifying agents) in Kosovo is only the fifth of the ATC level 2 of the C Group with consumption of 10.36 DID in 2013 or 24.82 DID in three year period while in Norway is the second after C09 with 375.2 DID in 2013 or 1215.2 DID in three year period.

According to the level 3 of ATC there are shown only selected agents which has higher numbers of consumption for the three years' time period with the five most used subclasses of group C which make 75% of total group C consumption:

- |  |           |
|--|-----------|
| 1. C09B – ACE Inhibitors Combinations        | 74.66 DID |
| 2. C09A - ACE Inhibitors                     | 51.15 DID |
| 3. C03C – High Ceiling Diuretics             | 32.12 DID |
| 4. C08C - Selective calcium channel blockers | 31.49 DID |
| 5. C07A – Beta Blocking Agents               | 26.59 DID |

*Table 2. DID for selected drug consumption of group C according to ATC level 3*

Row Labels	2011	2012	2013	Grand Total
ATC	DID			
C	86.36	97.13	110.06	293.55
C01	3.96	2.27	1.30	7.53
C01A	2.04	0.33	0.52	2.90
C03	8.39	14.40	19.26	42.04
C03C	6.57	12.32	13.23	32.12
C04	2.52	1.10	1.55	5.17
C04A	2.52	1.10	1.55	5.17
C07	8.55	7.89	10.18	26.62
C07A	8.55	7.89	10.15	26.59
C08	12.34	9.75	11.39	33.48
C08C	11.75	8.91	10.84	31.49
C09	43.97	52.05	53.70	149.72
C09A	16.57	17.35	17.22	51.15
C09B	21.55	25.89	27.22	74.66
C09C	2.06	2.47	2.31	6.85
C09D	3.78	6.34	6.94	17.06
C10	5.76	8.70	10.36	24.82
C10A	5.76	8.70	10.36	24.82
Grand Total	86.36	97.13	110.06	293.55

Continuing to analyze each agent or each individual drug it is seen that ACE inhibitors plain or in combination with diuretic are dominating the overall consumption for the three year period in Kosovo as shown in table three.

*Table 3. 25 most consumed drugs of group C for three years according to ATC level 5*

Row Labels	2011	2012	2013	Grand Total
	DID			
C	<b>86.36</b>	<b>97.13</b>	<b>110.06</b>	<b>293.55</b>
Lisinopril + Hct	9.01	14.21	11.33	34.55
Furosemide	6.57	12.30	13.05	31.93
Enalapril + Hct	11.45	9.31	8.93	29.69
Amlodipine	10.29	8.14	10.07	28.50
Enalapril	9.82	8.85	5.74	24.41
Lisinopril	3.66	5.66	10.65	19.97
Atorvastatin	4.51	6.73	7.56	18.81
Losartan + Hct	3.76	6.07	6.66	16.49
Ramipril	3.11	3.11	3.35	9.57
Bisoprolol	2.08	2.23	3.14	7.45

Metoprolol	2.76	2.05	2.16	6.96
Losartan	1.99	1.97	2.01	5.97
Ramipril + hct	0.95	1.88	2.74	5.57
Spirolactone	0.51	0.77	4.04	5.32
Carvedilol	1.25	1.53	1.31	4.10
Hydrochlorthiazide	0.96	1.05	1.50	3.51
Nebivolol	0.50	0.78	2.22	3.51
Atenolol	1.73	0.99	0.69	3.42
Pentoxifylline	1.75		0.67	2.43
Rosuvastatine	0.17	0.65	1.59	2.41
Simvastatin	0.88	0.84	0.54	2.27
Amiodarone	1.21	0.57	0.47	2.25
Nifedipine	1.38	0.35	0.43	2.16
Methyldigoxine	1.55	0.11	0.15	1.81
Calcium dobesilate	0.06	0.07	1.41	1.54

#### 4. DISCUSSION AND CONCLUSION

The overall consumption of the class C of drugs according to ATC classification which is the mostly used among other drug classes. This is similar to that presented in Norway as one of the countries with the highest GDP/capita and one of the countries with the highest budget for health per capita in Europe. Making the comparison between two countries that are with highest and lowest budget for health in Europe gives an overview that the trend of prescription is similar according to the level one of ATC while the quantity of used drugs differs significantly.

This can be also correlated to the fact that some of the drug subclasses that are widely used are of a preventing nature (which is expected to prevent cardiovascular problems like myocardial infarct, stroke, heart failure etc.) and which could be easily linked to life expectancy at birth which in Kosovo according to the Statistics Agency is 72 Years while in Norway according to Eurostat is 79.5 years.

It should be mentioned the fact that high unemployment rate and the lack of health insurance fund hence drug reimbursement makes it harder for patients to afford the continuous use of medicinal products preventive one or chronic therapy which might be one of the reasons of this significant difference with consumption data which is considered affecting their social life.

#### LITERATURE

1. Eurostat (2015) Statistics on life expectancy at birth –available from: <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tps00025>. Accessed on 05.04.2015.
2. Jakupi, A. (2014) Drug Consumption in Kosovo 2011-2013, Kosovo Medicines Agency. Prishtina Kosovo.
3. Jakupi, A. et al (2014) Drug register 3. Kosovo Medicines Agency. Prishtina Kosovo.

4. Retail Pharmacies in Kosovo (2015) Kosovo Medicines Agency. Available from <https://cloud.akppm.com/public.php?service=files&t=c7dea1dac27efc3778f50c5e99efbeb0>, accessed on 5.4.2015.
5. National Institute of Public Health of Kosovo (2013) Analiza e morbiditetit të popullatës së Kosovës për vitin 2011. Accessed online on May 22. Available from: [http://www.niph-kosova.org/index.php?option=com\\_jdownloads&Itemid=6&view=view.download&catid=3&cid=58](http://www.niph-kosova.org/index.php?option=com_jdownloads&Itemid=6&view=view.download&catid=3&cid=58)
6. Sagsahug S. et al. (2013) Drug Consumption in Norway 2008 – 2012. National Institute of Public Health. Norway.
7. WHO (2014) Structure and Principles of ATC classification. Available from [http://www.whocc.no/atc/structure\\_and\\_principles/](http://www.whocc.no/atc/structure_and_principles/), accessed online on 5.4.2015.



## **BLACK MIRROR – THE PORTRAYAL OF ADVERTISING PROFESSIONALS IN HOLLYWOOD MOVIES**

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### **ABSTRACT**

*The use of movies is a neglected tool in communication education, although there are a large number of motion pictures that feature professionals who work in advertising, marketing, or public relations, and these movies could be used excellently as illustrations in classrooms.*

*At the same time it is a fact that movies often stereotype these professions; furthermore, in the majority of cases, they depict them negatively. This, however, is probably just the result of the negative public image of the advertising industry in general, and movie makers' efforts to create portrayals that are as dramatic as possible.*

*In this study we examine how 27 films depict the marketing and communications profession, with special regard to the characters' personalities, clothes, appearance, family status, attitude to work and harmful habits.*

*As the results of the study suggest, we could state that people in advertising are workaholic lying males with chaotic private lives and harmful habits.*

*But how much of this statement is true? It would be easy to say 'none of it', but interviews conducted with Hungarian creative professionals have proven that half of it is actually true. At the end of the article we will see which half it is.*

**Keywords:** *Advertising and PR professionals, Public image, Portrayal in movies, Communication education*

### **1. INTRODUCTION**

Advertising (or, in a broader sense, the marketing and communications profession) has inspired several directors to cinematize the profession and its image. The earliest of these, *Gentlemen of the Press*, was made in 1929 and similar works have been produced ever since, almost every year (work.colum.edu, 2011). Turner Classic Movies has compiled a list of American movies, series and documentaries whose content is somehow related to advertising industry. The database includes 349 films. (Bátorfy - Hatala, 2010)

But what is this portrayal like? And how similar is it to reality? In this study we aim to answer these questions through the analysis of 27 movies and in-depth interviews conducted with Hungarian advertising professionals.

### **2. IMAGE: ADVERTISING AS DEPICTED IN MOVIES**

#### **2.1. Advertising people lie by their own admission**

In the examined movies the main characters themselves admit that they lie. For example, the following conversation happens in the series *Mad Men* about Don Draper, the main character (*Mad Men – Babylon*. 1/6. 2007, directed by Matthew Weiner):

*"- Don's in advertising.*

*- No way. Madison Avenue? What a gas.*

- *We all have to serve somebody.*
- *Perpetuating the lie. How do you sleep at night?*
- *On a bed made of money."*

In the political satire *Wag the Dog* they even declare war just to divert attention from the sex scandal of the President. But even in this case, they have the conversations (*Wag the Dog*, 1997. directed by Barry Levinson):

- "- *You want me to produce your war?*
  - *Not a war. It's a pageant. We need a theme, a song, some visuals. It's a pageant."*
- and
- "- *Yeah, but our guy did bring peace.*
  - *There was never a war.*
  - *All the greater accomplishment."*

In the movie *The Kid*, Russ Duritz makes a living by telling people what changes they should make to become compelling. He advises them on how to talk, dress, or put on makeup, what social circles to move in, where to shop – he basically interferes in the smallest details of their lives. As his childhood self, Rusty explains: *"You help people lie about who they really are... so that they can pretend to be someone else, right?"* (*The Kid*, 2000, directed by Jon Turteltaub)

In the comedy *A Crazy People* the main character, a copywriter goes as far as to say that people deserve being told the truth in advertisements. (*Crazy People*, 1990, directed by Tony Bill)

- "- *Let's not lie, Steve. Let's level with America.*
- *We can't level, you crazy bastard. We're in advertising."*

Even so, truth-telling advertisements go public:

- *"Buy Volvos. [...] This is not a smart time to be sexy anyway [...] Be safe instead of sexy."*
- *"The French can be annoying. Come to Greece. We're nicer."*
- *"Jaguar. Sleek and smart. For men who'd like hand-jobs from beautiful women they hardly know."*
- *"Metamucil: It helps you go to the toilet. If you don't use it, you'll get cancer and die. Yes! I want to go to the toilet."*
- *"Vitaflex. Stop pretending. If you look like this, you're fat. In fact, you're a fat slob. Admit it. Do something about it. Want to stop sweating on cool days? Get to a phone. Call Vita Flex now. We'll send you a free plant. A free plant for fat slob."*
- *"If you're risking cancer, shouldn't your cigarette deliver real flavour? Shouldn't something that might make you die taste great?"*
- *"Come to New York – There were fewer murders last year."*
- *"Sony. Because Caucasians are just too damn tall."*

Picture 1: An honest advertisement: *"United – Most of our passengers get there alive."*



Source: *Crazy People* (1990, directed by Tony Bill)

## 2.2. The majority of creative professionals are males

As the summary table shows, the films analysed feature characters that are almost all males, as if only males are employed in marketing, advertising and public relations. The rare exceptions include Samantha Jones, public relations manager in *Sex and the City*.

## 2.3. Advertising professionals go to work in suits

With a few exceptions, movies feature advertising professionals wearing suits. Just as in the case of office jobs generally, we can say that if you work in advertising, it does matter what clothes you take out of the closet in the morning. A suit lends the wearer a sense of confidence and seriousness, and serves as an expression of respect. Their colours are usually grey, black, or dark blue. It is a typical scene in such movies that characters wearing suits lean back in leather armchairs and immerse in thoughts. In order to illustrate this, we have compiled the montage below.

*Picture 2: Typical advertising professionals: in suits and leather armchairs. Left to right: Nick Naylor, Don Draper, Ted Kramer, Nelson Moss, Dan Foreman, Nick Marshall*



Source: *Thank You for Smoking* (2005, directed by Jason Reitman), *Mad Men* (2007, directed by Matthew Weiner), *Kramer vs. Kramer* (1979, directed by Robert Benton), *Sweet November* (2001, directed by Pat O'Connor), *In Good Company* (2004, directed by Paul Weitz), *What Women Want* (2000, directed by Nancy Meyers).

In movies neckties are standard accessories of suits. In the 3D movie *The Smurfs* the little creatures arriving from their village wonder what this garment is good for (*The Smurfs*, 2011, directed by Raja Gosnell):

- "- *Someone looks smurfalish!*
- *Why you wearing a leash?*
- *It's a tie.*
- *Does it keep your neck warm?*
- *No.*
- *Clearly, it functions as an aid in his craft, like a blacksmith's apron.*
- *I wear it because it's what everyone wears at work."*

The brand and price of a necktie are just as determinant as in the case of a suit. In the movie *The Hucksters* we can eyewitness and hear how such a necktie is purchased (*The Hucksters*, 1947, directed by Jack Conway):

- "- *Anything?*

- *I want a very sincere necktie.*
- *I beg your pardon?*
- *I want something that makes me seem sincere.*
- *???*
- *You know, honest; genuine; upright; trustworthy.*
- *Well... um, here's a handpainted one in four colors; at 35 dollars. Is that sincere enough?*
- *I think, my friend, any more sincerity would be downright foolhardy."*

Brands have a very significant role in pointing out the differences between people with and without suits. Customized, tailor-made, expensive clothes suggest that the person wearing them is extremely talented in his work and makes so much money out of successful businesses that he can afford such luxury.

In the movie „Kramer vs. Kramer” the following conversation takes place (Kramer vs. Kramer, 1979, directed by: Robert Benton)

*"- They're going to make me an assistant art director.*

*- You get yourself a Burberry coat. If you're gonna be Madison Avenue, you have to look it."*

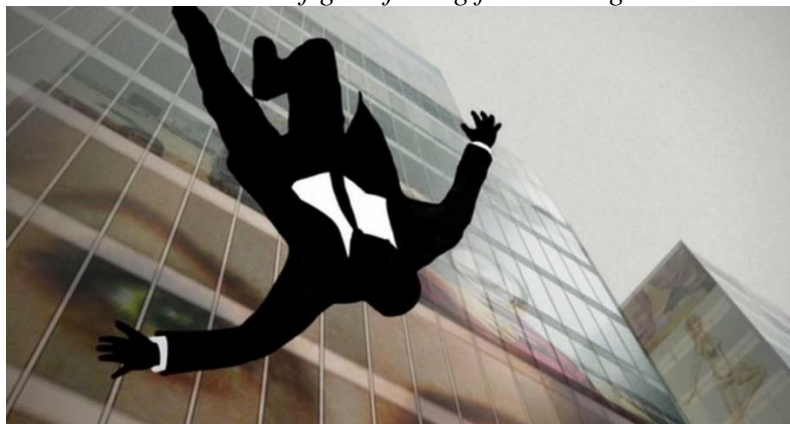
Looks can also be used as a tool of deception. As PR manager Stue Shepard says in the movie Phone Booth (Phone Booth, 2002, directed by Joel Schumacher) *"I wear all this Italian shit because underneath, I still feel like the Bronx. I think I need these clothes, and this watch. My \$2000 watch is a fake, and so am I. I neglected the things I should've valued most. I valued this shit. [...] I mean, I work so hard on this image, on Stu Shepard, the asshole... who refers to himself in third person, that I only proved I should be alone. I've been dressing up as something I'm not for so long... I'm so afraid you won't like what's underneath. But here I am. I'm just flesh and blood and weakness."*

Or, as the sports agent PR professional of the movie Jerry Maguire grumbles: *"Who had I become? Just another shark in a suit?"* (Jerry Maguire, 1996, directed by Cameron Crowe)

The link between looks and work is perfectly characterized by the short introduction (title sequence) appearing at the beginning Mad Men episodes. (Mad Men, title sequence. 2007, directed by Weiner, Matthew)

A black, faceless silhouette wearing a suit enters the office and puts down his briefcase. All of a sudden the room slides apart, falls into pieces, and the next moment our protagonist is falling down from the window of a tall building. There are advertisements of consumer goods all around him, all creating an illusion of the American dream: charming housewives, pretty spouses, wedding rings, happy families. However though, the overall picture is very depressing. The falling represents insecurity and uneasiness, but he does not hit the asphalt. There is a swift cut, and the dark figure is seen in a safe environment, sitting in a leather armchair, smoking – he is waiting for the start of the new episode together with us. (Tranzit.blog.hu 2011)

*Picture 3: Faceless figure falling from a height in a suit*



Source: Weiner, Matthew (director): Mad Men. 2007

Following from the above, we can state that suits do not only play a functional role. Pressed trousers, varnished shoes, cuff links and tiepins all suggest balance and composure, although according to the movies these people are anxious and extremely busy, often impatient and nervous. They live for their work and find little time to relax.

#### 2.4. Creatives are obsessed workaholics

All advertising professionals appearing in the examined movies are obsessed workaholics. They devote all their attention to their current assignment. If necessary, they even take notes on a napkin during dinner. They are not afraid of challenge and immerse in the topic. They test the product, read the book, and seek consumers' opinion. Usually they do not go to work early, but they stay in the office late as well. Their work space covers more than the office area. Depending on the expectations and wishes of the client they spend their evenings in restaurants, theatres, clubs or striptease bars in order to get their trust. As the father of Pete Campbell, a character in *Mad Men* exclaims: *"I run into you at the club, you're working. At a restaurant, you're working. Taking people to dinner, wining and whoring? That's not a job for a white man."* (*Mad Men* – New Amsterdam. 1/4. 2007, directed by Weiner, Matthew)

The movie *"Sweet November"* features a similar scene. Nelson Moss' girlfriend tries to convince him this way (*Sweet November*, 2001, directed by: O'Connor, Pat):

*"-You know, there are people who don't work 24 hours a day.*

*- I have a life, Angelica. And I'm late for it."*

Movies suggest that marketing, advertisement and PR professionals are always in a race with time. They complete all their jobs to a tight deadline. Their schedule is loaded with meetings, conferences and discussions, and all their moments are busy. This telephone conversation could be heard in the movie *"Thank You for Smoking"* (2005, directed by Jason Reitman):

*"-You still at the office?*

*- Do you know what time it is in Tokyo right now?*

*- No.*

*- 4:00 P.M. tomorrow. It's the future, Nick. [...]*

*- Oh, that's London calling.*

*- Jeff, when do you sleep?*

*- Sunday."*

Eli Wurman in *"People I Know"* takes drugs and sleeping pills, he also smokes and drinks. His health is deteriorating. His looks reflect his state of mind – he has tousled hair, wrinkled clothes, and circles around his eyes. He hardly sleeps as he organizes and manages events day and night. (*People I Know*, 2002, directed by Daniel Algrant)

*"- I saw you last night working in the room. You looked ashen and miserable. Hustling.*

*- Well, I'm a PR guy, honey. That's what I do."*

Workaholism also means that professionals must try products and perform tests with them. This important rule was also clear to Nick Marshall in the comedy *"What Women Want"* (2000, directed by Nancy Meyers). As he leaves the office of his new boss with a box of women's stuff that need new creative concepts, he does not want to disappoint his boss, therefore he tests all of them – he cleans his face, polishes his nails and waxes his feet.

Nelson Moss gets into a similar situation in the movie *"Sweet November"* (2001, directed by Pat O'Connor). He knows that the thing to advertise is more than just a hot dog. He gets up with wordplays, develops visuals during the day, eats hot dog sausage for dinner, and does not stop for a moment.



Picture 4: Advertising professionals test the products being advertised, just as Nick Marshall did in "What Women Want"



Source: What Women Want (2000, directed by Nancy Meyers)

## 2.5. Creatives have a chaotic personal life

As we can see from the above, advertising professionals in these movies devote all their attention to work. They usually cannot afford the time for themselves, their families, wives, and children. Even if they can, they are anxious and work out their anger on family members. Their intense workaholicism and lack of time may be the reason for not being able to maintain a happy marriage. In the movie "Sweet November" Sara is mocking Nelson saying *"No, you are a walking case study. Look at you. You're a workaholic at such an advanced stage that your intimacy skills have withered away to almost nothing. Left untreated you could become emotionally extinct."* (Sweet November, 2001, directed by O'Connor Pat)

In the comedy "The Kid" Russ Duritz (Bruce Willis) has to face his childhood self (Spencer Breslin) to realize what he wanted to achieve when he was young and where he is now compared to that. A bachelor in his forties with an arrogant manner, being paid big bucks for advising insecure people on how to shape their image. *"So, I'm 40, I'm not married, I don't fly jets, and I don't have a dog. I grow up to be a loser."* (The Kid, 2000, directed by Jon Turteltaub)

The star of "What Women Want", Nick Marshall is characterized this way: *"He'll send you on more errands than anyone in the entire company [...] He's the least politically correct guy in the universe. He's the king of all the T & A ads we do. You want babes in bikinis? He's your man."* His mother was a bar dancer, which made him grow up among scantily dressed women with little scruples, providing an explanation for his job and dissolute lifestyle. Unlike his mother, he could not establish a close parental relationship with his child. His daughter does not even call him father; she just calls him by his first name as if they were strangers. His former wife is just about to wed her new fiancé. (What Women Want, 2000, directed by Nancy Meyers)

The reason why wives tend to leave their husbands is not only their excessive work – the infidelity of husbands also plays a significant role. In the thriller "Phone Booth" a sniper is punishing Stuart Shepard because his life has been based on lies. *"You are guilty of inhumanity to your fellow man."* The sniper forces him into a phone booth where he is giving him instructions. Shepard must not hang up the phone because his life is at stake. He is told to call his wife and lover, one after the other, and confess the truth – that he has only taken advantage of them and leading them on. (Phone Booth, 2002, directed by Joel Schumacher)

## 2.6. Creatives often live with addictions

"Jerry Maguire" touches alcohol in his disappointment after being fired. Graham Marshall, the main character of "A Shock to the System", drinks alcohol to gain strength to plan his actions. Nick Marshall also likes to pull a cork to find out "What Women Want"; not to mention Nick Naylor, who is the chief spokesman and vice-president of the Academy of Tobacco Studies in the movie "Thank You for Smoking".

Characters of „Mad Men”, a series presenting advertising in the sixties, light a cigarette every minute on average. Pete Campbell is the only one who does not smoke, but all others do. Even women do smoke – when they see their psychologist or gynecologist, or when they are in the kitchen, cooking or washing the dishes. Just everywhere. They do not even care if they are pregnant (Mad Smoke, 2010).

"- *You smoke.*

- *All the time. It's practically mandatory in our office.*" (Mad Men – Indian Summer. 1/11. 2007, directed by Matthew Weiner)

The excessive consumption of cigarettes is not the only characteristic of the movie...

"Compared to them, the characters in Dallas are purely abstinent." (Baski, 2008)

"- *How many drinks do you have a day? Wine, cocktails, beer.*

- *Everything depends on the day.*

- *Days of plenty being Three.*

- *You're a high-powered businessman with a high-tension job. I'm trying to help you here.*

- *Five.*

- *And two packs a day, but you're cutting down.*" (Mad Men – For Those Who Think Young. 2/1. 2008, directed by Matthew Weiner)

A glass of whiskey in the hands is one of the external characteristics that make these men feel like a man. Clothing, sipping, and motions of smoking are all the visuals of their profession. They are nonverbal signals that demonstrate their belonging to the group. "*Now, my generation? We drink because it's good. Because it feels better than unbuttoning your collar. Because we deserve it. We drink because it's what men do.*" (Mad Men – New Amsterdam. 1/4. 2007, directed by Matthew Weiner). It is ironic that these statements are made by Roger Sterling, whose rough lifestyle results in two heart attacks some time later. They always find a reason for drinking. "*Should we drink before the meeting or after? Or both?*" (Mad Men – Smoke Gets in Your Eyes. 1/1. 2007, directed by Matthew Weiner) Drinking is a solution to creative crises, and also the best thing to do if an assignment was successful (or it was a failure), they had a tough day, or they just do not have anything else to do. (Vulture: How to drink like a Mad Men, 2010)

Picture 5: Roger Sterling and Don Draper in a bar



Source: Mad Men - Six Month Leave. 2008. 2/9. (directed by Matthew Weiner)

Table 1: Marketing, advertising and PR characters in examined movies, their family status and addictions

Film Title	Role	Job	Advertised product/person	Family status	Does he/she smoke?	Does he/she consume alcohol?
Phone Booth	Stuart Shepard	publicist	musicians	unfaithful husband	✓	✓
The Hucksters	Victor Albee Norman	advertising professional	soap	single	✓	✓
The Kid	Russ Duritz	image consultant	anyone, depending on assignment	single	x	✓
America's Sweethearts	Lee Phillips	producer	actors and actresses	single	x	x
Wag The Dog	Conrad Brean	PR manager	the American President	not displayed in the film	x	x
Jersey Girl	Ollie Trinke	publicist	musicians	widower	✓	✓
All the President's Men	Claudia Jean Cregg	spokesperson	the American President	complicated	x	✓
Sweet November	Nelson Moss	advertising professional, creative	anything, depending on assignment; here: hot dog	left by girlfriend	x	✓
Criminal Minds	Jennifer Jareau	spokesperson	FBI	married	x	x
A Shock to the System	Graham Marshall	executive in an advertising company	not displayed in the film	widower (killed his wife)	✓	✓
Hancock	Ray Embrey	PR spokesperson	charity organisations, superhero	married	x	x
Door to Door	Bill Porter	door-to-door salesman	detergents	single	x	x
The Smurfs	Patrick Winslow	advertising professional, creative	cosmetics	married	x	x
People I Know	Eli Wurman	PR manager, publicist	actors and actresses	single	✓	✓
Jerry Maguire	Jerry Maguire	sports manager	sportsmen	left by girlfriend, then married	✓	✓
In Good Company	Dan Foreman	advertising executive, former head of sales	anything, depending on assignment	married	x	x
Thank You for Smoking	Carter Duryea	advertising executive, new head of sales	anything, depending on assignment	divorced	x	x
	Nick Naylor	spokesperson	cigarette	divorced	✓	✓
Kramer vs. Kramer	Ted Kramer	advertising executive	not displayed in the film	divorced	✓	✓
Crazy People	Emory Leeson	advertising executive	anything, depending on assignment	divorced	x	x



Mad Men	Don Draper	creative director	anything, depending on assignment	unfaithful husband, then divorced	✓	✓
	Roger Sterling	founder partner	anything, depending on assignment	unfaithful husband, then divorced	✓	✓
	Pete Campbell	account executive	anything, depending on assignment	unfaithful husband	x	✓
Melancholia	Justine	copywriter	not displayed in the film	left by husband after wedding	x	✓
What Women Want	Nick Marshall	advertising professional, creative	anything, depending on assignment	divorced	✓	✓
Edward Scissorhands	Peg Boggs	door-to-door saleswoman	cosmetics	married	x	x
	Kevin Gibbons	copywriter	anything, depending on assignment; here: shoes	single	x	✓
Love and Other Drugs	Jamie Randall	door-to-door salesman	medicines	single	x	x
	Samantha Jones	PR manager	anything, depending on assignment	single	x	✓
Perfect Stranger	Harrison Kill	advertising executive	anything, depending on assignment	unfaithful husband	x	✓

Source: Takács, Zsanett: Főszerepben a  
 ("Advertising professionals as main characters".  
 Thesis paper. Budapest College of  
 Communication and Business.  
 Supervisor: Papp-Váry, Árpád)

## **2.7. The overall view as depicted in movies**

In the table above we have summarized the movies' characters in marketing and advertising roles, and the items they market or advertise. In addition we also listed the characters' family status and addictions. The table represents the results of our analysis of the movies.

All in all, we can summarize the results in a single sentence: according to the movies, people in advertising are workaholic lying males with chaotic private lives and harmful habits.

## **3. REALITY: ADVERTISING PROFESSION ACCORDING TO IN-DEPTH INTERVIEWS**

The analysis of films was followed by the next phase of our research. We interviewed Hungarian advertising professionals about the same questions; that is, we found out to what extent the depictions of the movies match reality.

Our interviewees were (in alphabetical order):

- Melinda Becskereki, Copywriter, Tóth Avanti és Társai Discount Agency
- Vilmos Fekete, Creative Director, Leo Burnett Advertising Agency
- Gyula Kisantal, Creative Director, D'Arcy Avenue Advertising Agency
- Nóra Péter, Junior Account Manager, Morpho Communications (formerly copywriter at Ogilvy and Mather Advertising Agency)
- Balázs Pöcze, Creative Director, Mito Agency
- István Sas, Advertising Psychologist, multiple Cannes prize winning commercial film director, the founder of KOAK Communications Academy

The first surprise was that these renowned advertising professionals hardly saw any of the examined movies. However, they also had a reason for it. Gyula Kisantal, creative director at D'Arcy Avenue Advertising Agency explained that "No one is interested in movies on himself or his profession. There's nothing interesting in that. It's more than enough to see the real one." He claimed that movies only serve entertainment purposes, and the advertising industry is not like it. Based on the movies seen, István Sas thinks that "Films represent advertising industry as an irrational world. Whether someone is a good creative or not always depends on the goodwill of a person. They depict extreme situations, but there is no tangible task." Melinda Becskereki, however, decided to become an advertising professional when she saw the movie *Sweet November* as a youngster. She thought "There is a job where I can invent exciting things and get paid for it!"

Now let us see the questions based on aspects highlighted by movies.

### **3.1. Do advertising people lie by their own admission?**

The practitioners we interviewed did not agree with this statement. Furthermore, they referred to the agency slogan of McCann-Erickson: "Truth Well Told".

### **3.2. Are the majority of creative professionals males?**

Their answer was an unanimous "yes", meaning that there are more male creatives, copywriters and graphic designers than female ones. As Vilmos Fekete says "Creatives must be gigantically exhibitionistic in this profession, and males are more like it".

István Sas claims that there are more male creatives because women cannot stay in the profession in the long term if they want a family – nevertheless, he thinks that there are very good female creatives, too. Melinda Becskereki also states that she has only met male creative directors during her career to date. In her opinion there are more male creatives because they tolerate this rush and lifestyle better. Nóra Péter thinks women perform better as account managers because they can divide their attention between various tasks, while men are better at control and concentration on a single matter, resulting in more male creatives.

### **3.3. Do advertising professionals go to work in suits?**

The answer to this question was "Just look around!" Most people wear casual and comfortable everyday clothes. According to Vilmos Fekete, Creative Director at Leo Burnett Advertising Agency "Advertising people typically wear modern city clothes, which helps us stay young longer as we have to follow fashion and new trends. Our clothes are meant to suggest that we do nothing according to the rules. By wearing sophisticated and trendy clothes we can convince our customers that we are good. It is important that the clothes we wear be expensive and demonstrate that the reason we do not wear suits is not because we cannot afford them, but because we can distinguish our work and ourselves from others this way." Gyula Kisantal said, "Recently I gave a lecture at the Spar marketing conference which I attended wearing a suit and pink slippers with pom-poms. By doing that I wanted to suggest that we do not have to go wall-to-wall, but need to find the tiny point where or by which we can make an impression. In that case my pink slippers with pom-poms served as that tiny point. By the way I never wear a suit; I always prefer comfortable clothes." Nóra Péter mentioned that "All creatives like to wear trendy and modern stuff, and dress up with style including something creative and unique. Creative directors are usually the ones with the coolest clothes, drawing attention to their uniqueness."

Balázs Pöcze, Creative Director at Mito Agency, does not even have a suit. He considers that type of freedom a "creative directors' luxury". In the interview he also admitted that he does not like to "be paid for his looks". István Sas agreed that a suit is not a typical part of the creative set, and you may even notice jeans-wearing creatives from a distance at award ceremonies.

This indestructible piece of clothing is, at the same time, a part of the clothing style called "smart casual". Pöcze's account management colleagues also wear jeans with leather shoes, unbuttoned shirts, a jacket, and no ties. But this is not a general trend, either; it depends on the person and the occasion. Pöcze noted jokingly, "When our executive director appears in a meeting wearing a suit, I always say to the clients that he has just arrived back from a court hearing..."

Our interviewees also pointed out that there are many people who want to work in the world of advertising because they do not have to wear suits or costumes all day long.

### **3.4. Are creatives obsessed workaholics?**

Yes, they are. Our interviewees all stated that you cannot just switch off, although you can learn to manage that. Good creatives are always thinking about ideas, keeping their eyes open, because their impressions at the movies, at home, on the street, or even in shopping centres may all result in great new ideas.

This is also the reason why advertising professionals are much more straightforward and open people. Relationships between people working at the same company are also closer as they may gain new ideas sharing family stories or news from their lives. Therefore they try to share as much information as possible, facilitating their own and each other's work.

It is also true that they do a lot of work. Gyula Kisantal said that when someone sent an email to all colleagues at 8 or 9 PM in the old times when they were not allowed to work in home office yet, most people replied that evening, which shows that they were still working in the office. It is true that they tend to go to work later, but they also stay in the office later. Melinda Becskereki claims that she gets to her workplace at around 9.30 AM, but she never leaves before 7 PM. Nóra Péter also stays in the office until 10 PM, as she prefers working in the evening hours.

### 3.5. Do creatives have a chaotic personal life?

István Sas considers that most advertising professionals are single or divorced because the profession requires continuous thinking and takes a lot of time, creating a way of life that only a few people can manage. On the other hand, Vilmos Fekete claims that the number of divorced creative professionals is so high because they meet and contact several people every day, therefore male creatives (and even female ones) are often seduced.

### 3.6. Do creatives often live with addictions?

Balázs Pőcze does not agree with this statement. Only a few Mito employees smoke, and he thinks that the degree of alcohol consumption is no different from other professions, either. Pőcze says that the difference is "casual drinking, that is, drinking during daytime". István Sas agrees that there is no close link between advertising and harmful habits. Just as in other industries, the leader, his/her management style and attitude have a great influence on the team: "Well, you know, sometimes they call me a champion of quantities because I have done it a lot. But I would exaggerate the influence of alcohol if I said it has been involved in two good ideas out of a thousand."

## 4. THE SUMMARY OF THE RESULTS

Let us see a summary table comparing the realities of advertising with the image presented in movies.

*Table 2: The image of advertising as depicted in movies, compared with reality*

<i>Image based on movies</i>	<i>Reality at advertising agencies (according to advertising professionals)</i>
Advertising people lie	False
The majority of creative professionals are males	True
Advertising professionals go to work in suits	False
Creatives are obsessed workaholics	True
Creatives have a chaotic personal life	True
Creatives often live with addictions	False

Source: The results of own research based on 27 examined movies and 6 in-depth interviews

All in all we can say that there is an overlap between movies and reality. Movies often exaggerate or overstate certain things to make them more interesting for the audience. We get emotional while watching romance, we are frightened by horror, we laugh at comedies, but deep inside we feel that in reality not all relationships have a happy ending, most owners of roadside hotels are not murderers, and the source of humour is not always funny for everyone. Depictions in movies on advertising are shallow, and they highlight stereotypes. Some of it is actually true, and some of it is not. Therefore we could say that "Any resemblance to real persons is purely coincidental."

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## LITERATURE

1. Turner Classic Movies: <http://work.colum.edu/~amiller/tcmlist.htm> Download: 03.12.2011.
2. Bátorfy, Attila – Hatala, Noémi: Reklámok a vásznon ("Advertisements on screen"), = Kreatív, 2010. (vol. XIX.) Issue 4. pp. 29.
3. Tranzit.blog.hu: Mad Men – Álom és hazugság határán ("Mad Men – On the Borderline Between Dreams and Lies"): [http://tranzit.blog.hu/2011/06/28/mad\\_men\\_alom\\_es\\_hazugsag\\_hataran](http://tranzit.blog.hu/2011/06/28/mad_men_alom_es_hazugsag_hataran), Download: 24.01.2012.
4. Mad Smoke: Every Cigarette Smoked in Mad Men: <http://www.youtube.com/watch?v=PtMfzasLbu8> Publication: 26.07.2010. Download: 01.02.2012.
5. Baski, Sándor: Reklámőrültek ("Mad Men"): <http://www.mozinet.hu/index.nof?o=0&nyelvid=1&k1=1&k2=43&filmid=3548> Publication: November 2008. Download: 01.12.2011.
6. Vulture (2010): How to drink like a Mad Men (NewYorkMagazine): [http://www.youtube.com/watch?v=FtX2\\_bOWNmQ&feature=related](http://www.youtube.com/watch?v=FtX2_bOWNmQ&feature=related) Publication: 23.07.2010. Download: 01.02.2012.

## FILMOGRAPHY:

Year	Director	Film Title	Role	Job
1947	Jack Conway	The Hucksters	Victor Albee Norman	advertising professional
1976	Alan J Pakula	All the President's Men	Claudia Jean Cregg	spokesperson
1979	Robert Benton	Kramer vs. Kramer	Ted Kramer	advertising executive
1990	Jan Egleson	A Shock to the System	Graham Marshall	executive in an advertising company
1990	Tony Bill	Crazy People	Emory Leeson	advertising executive
1990	Tim Burton	Edward Scissorhands	Peg Boggs	door-to-door saleswoman
1996	Cameron Crowe	Jerry Maguire	Jerry Maguire	sports manager
1997	Barry Levinson	Wag The Dog	Conrad Brean	PR manager
1998-2004		Sex and the City	Samantha Jones	PR manager
2000	Nancy Meyers	What Women Want	Nick Marshall	advertising professional, creative
2000	Jon Turteltaub	The Kid	Russ Duritz	image consultant
2001	Joe Roth	America's Sweethearts	Lee Phillips	producer
2002	Joel Schumacher	Phone Booth	Stuart Shepard	publicist
2002	Steven Schachter	Door to Door	Bill Porter	door-to-door salesman
2002	Daniel Algrant	People I Know	Eli Wurman	PR manager, publicist

2004	Kevin Smith	Jersey Girl	Ollie Trinke	publicist
2001	Eric Bross	On the Line	Kevin Gibbons	copywriter
2001	Pat O'Connor	Sweet November	Nelson Moss	advertising professional, creative
2004	Paul Weitz	In Good Company	Dan Foreman	advertising executive, former head of sales
			Carter Duryea	advertising executive, new head of sales
2005	Jason Reitman	Thank You for Smoking	Nick Naylor	spokesperson
2005-	-	Criminal Minds	Jennifer Jareau	spokesperson
2007	James Foley	Perfect Stranger	Harrison Hill	advertising executive
2007-	-	Mad Men	Don Draper	creative director
			Roger Sterling	founding partner
			Pete Campbell	account executive
2008	Peter Berg	Hancock	Ray Embrey	PR spokesperson
2010	Edward Zwick	Love and Other Drugs	Jamie Randall	door-to-door salesman
2011	Raja Gosnell	The Smurfs	Patrick Winslow	advertising professional, creative
2011	Lars von Trier	Melancholia	Justine	copywriter

#### **IN-DEPTH INTERVIEWS:**

- Melinda Becskereké, Copywriter, Tóth Avanti és Társai Discount Agency
- Vilmos Fekete, Creative Director, Leo Burnett Advertising Agency
- Gyula Kisantal, Creative Director, D'Arcy Avenue Advertising Agency
- Nóra Péter, Junior Account Manager, Morpho Communications (formerly copywriter at Ogilvy and Mather Advertising Agency)
- Balázs Pöcze, Creative Director, Mito Agency
- István Sas, Advertising Psychologist, multiple Cannes prize winning commercial film director, the founder of KOAK Communications Academy

## STRUCTURAL CHANGES IN EXPORTS OF VISEGRAD COUNTRIES: EVIDENCE FROM THE SECTORAL DATA

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### ABSTRACT

*The paper aims to investigate the structural changes in exports of Visegrad group of countries (The Visegrad four, V-4: Poland, the Czech Republic, Slovakia, Hungary) after the EU accession in 2004-2014. We estimate the augmented gravity model for sectoral export flows of V-4 with the rest of the world for each BEC (UN Broad Economic Categories Classification) category by employing Poisson pseudo-maximum-likelihood (PPML) estimator. Estimation results indicate that V-4 mainly gain comparative advantage in "consumer goods" and "transport equipment and their parts and accessories". Trading with the EU15, new member states (NMS) of the EU and post-Soviet states is considerable, however the highest positive impacts come from the trading with the other V-4 countries.*

**Keywords:** *international trade, sectoral trade analysis, gravity model, Visegrad group.*

### 1. INTRODUCTION

Trade in intermediates was always important, but before internationalization of supply chains occurred in the last two decades, it was proportional to trade in final goods (Yi, 2003 cited in Baldwin and Taglioni, 2011). Since globalization and internalization caused the boom in the trade between advanced nations and emerging economies and gross trade flows became unrepresentative of the value-added flows. Already in 1963, Vanek presented an extension of the Heckscher-Ohlin model allowing for intermediates trade. Later on, the book by Grubel and Lloyd (1975) made clear that intra-industry trade was important in intermediates and not in final goods. More recently, several authors put their focus on the issue at hand (Helpman and Krugman, 1985; Jones and Kierzkowski, 1990; Hummels, Rapoport and Yi, 1998; Kimura, Takahashi and Hayakawa, 2007; Grossman and Rossi-Hansberg, 2008; Li and Beghin, 2012) and demonstrate that while trade policy implications are harder to draw generally, disaggregated data analyses leads to more precise sector-specific policy implications. We focus on the implications of the EU enlargement and particularly on the case of V-4. Recent studies indicate that since the EU accession in 2004, instead of trade intensification with the EU15 intra V-4 trade has surprisingly increased. Once taking into account that the literature lacks the evidence from the sectoral data, we examine the pattern of V-4 exports on the sectoral level. We construct the panel data of export flows of V-4 with the rest of the world for each BEC category in 2004-2014 and estimate the augmented gravity model by employing PPML estimator. Estimation results reveal that V-4 mainly gain comparative advantage in "consumer goods" and "transport equipment and their parts and accessories". Additionally, trading with the EU15, NMS and post-Soviet states is considerable, however the highest positive impacts come from the trading with the other V-4 countries. The rest of the paper is organized as follows: section 2 presents the literature review, section 3 specifies model and describes the data followed by estimation results in section 4 and finally the last section concludes the findings of the analysis.

## 2. LITERATURE REVIEW

The most popular theoretical framework for the empirical trade analysis is gravity model (Soloaga and Winters 2001, Ghosh and Yamarik 2004, Carrere 2006, Silva and Tenreyro 2006, Baier and Bergstrand 2009, Magee, 2008, Acharya et al. 2011) introduced by the crucial work of Jan Tinbergen (1962). Based on a law called the “gravity equation” by analogy with the Newtonian theory of gravitation, gravity model reflects the relationship between the size of economies, the amount of their trade and the distance between the trade partners, as follows:

$$X_{ij} = GS_j M_j \phi_{ij}$$

where  $X_{ij}$  is the monetary value of exports from  $i$  to  $j$ ,  $M_j$  controls for all importer-specific factors that make up the total importer's demand and  $S_j$  comprises exporter-specific factors that represent the total amount exporters are willing to supply.  $G$  is an independent variable from  $i$  and  $j$ , such as the level of world liberalization. Finally,  $\phi_{ij}$  represents the trade costs between  $i$  and  $j$  countries. The latter is mainly represented as the country-pair-specific information such as contiguity and distance, common language, ethnic groups or borders, common memberships in regional trade agreements and tariff rates between trade partners. Based on the gravity model, studies reveal some of the characteristics of trade performances of V-4. Namely, the literature demonstrates that the EU accession has increased the intra Visegrad trade flows relatively more than trade between V-4 and the other EU members. Hornok (2010) highlights the role of the elimination of non-tariff barriers as accelerator of the boost in intra V-4 trade. Hunya and Richter (2011) reveal the importance of the FDI inflows from the EU-15 and other advanced countries in increasing trade between the Visegrad four. Foster (2011) finds the improved economic performances reflected in GDP growth rates of the V-4 to have the positive impacts on trade flows between the V-4. Furthermore, the role of the government export promotion for all the Visegrad countries is analyzed by Janda, Michalíková and Psenakova (2013) and Janda (2014), who find significant positive impacts of export credit agencies (ECAs) on export performances of V-4. Additionally Akhvlediani and Sledziowska (2015) find the positive and statistically significant impacts of Common Commercial Policy (CCP) of the EU on the V-4 exports and moreover reveal that together with EU trade partners, trading with post-Soviet countries is considerable even after the EU accession of V-4. However when it comes to the sectoral trade analysis of the V-4, the literature is quite scarce. The importance of sectoral trade between OECD and Central and Eastern European Countries (CEEC) is highlighted in findings of Olper and Raimondi (2008). Authors focus on the agricultural sector and assess the level of agricultural market trade integration among 22 OECD countries for the 1994–2003 period. After controlling for economic size, transport costs, and other non specified trade costs, the fixed effects and McCallum estimations of the augmented gravity model calculates border effect between OECD and CEEC to reach 146. Compared to the average border effect between the EU countries that amounts only 6.8, border effect between OECD and CEEC appears the most trade-impeding in the sample. Furthermore, the level of integration in the intra-CEEC agricultural trade is found twice as strong as that in the EU-CEEC trade. Thus, authors conclude that the process of trade liberalization between EU and CEEC has not yet produced the expected results at the agricultural level. More recently, Qineti and Smutka (2011) examine V-4 trade in agricultural sectors. Authors find that in recent years the share of the EU members in the value of V-4 agricultural trade is increasing at the expense of trade with the “third countries”. Based on the analysis of Growth-Share Matrix and simple OLS regressions, the authors predict, that together with the intensification of V-4 integration within the EU single market, prices of agrarian exports will furthermore raise. Li and Beghin (2012) furthermore study the impacts of the technical measures and barriers and find that on the agriculture and food industries are more impeded by the technical measures and barriers than other sectors. Additionally, authors underline that SPS regulations on agricultural and food trade flows from developing exporters



to high-income importers are more likely to be trade impeding than similar barriers in North–North trade. Without putting the research focus on agricultural products, Brodzicki (2011) studies the structural changes in the trade flows of V-4 and finds that the number of product groups with revealed comparative advantage is decreasing. Although, the paper outlines that V-4 are improving their positions in extra-EU partners but losing it with intra-EU partners and in particular with the EU15, with the only exception of Slovakia, which boosts its comparative potential not only with other states of V-4 but also with the EU8 states. To conclude, the literature demonstrates general characteristics of the trade pattern of V-4 countries. The analysis of the overall trade flows indicates the surprising intra-V4 trade intensification after the EU accession of V-4. The same is observed for the agricultural sector of CEEC. Particularly for the case of V-4, there is the evidence that the share of the EU members in the value of V-4 agricultural trade is increasing at the expense of the trade with the “third countries”. However, on the other hand, there is also the evidence that once considering the number of product groups with revealed comparative advantages, V-4 are improving their positions in extra-EU partners but losing it with intra-EU partners. So quite scarce literature on the structural trade analysis of V-4 does not provide a complete picture of the structural changes in the sectoral trade of V-4. Therefore, we find considerable to analyze exports of V-4 since the EU accession on the sectoral level, covering other sectors apart from the agricultural one. Additionally, besides considering different product groups, we also split the trade partners into the main country groups. Namely, we control for the EU15, NMS, post-Soviet countries and the rest of the countries with which there is a trade agreement concluded. Thus, our paper aims to cover the gap in the literature by providing the estimates of the structural changes in exports of V-4 by analyzing sectoral data and by examining the main export directions of V-4.

### 3. MODEL SPECIFICATION AND DATA DESCRIPTION

Although the gravity model is already a commonly accepted and a standard tool to study the trade flows, the specification of the equation for estimation purposes differs according to the approaches of different authors. The most remarkably, Silva and Tenreyro (2006) in their seminal paper have raised a problem that has been ignored so far by both the theoretical and applied studies. In particular they argued, that the logarithmic transformation of the original model is not relevant approach to estimate elasticities. Namely, the multiplicative trade models with multiplicative error do not satisfy the assumption of the homoscedasticity of the error term since there is dependency between the error term of transformed log-linear model and the regressors, which finally causes inconsistency of the ordinary least squares estimator or the random and fixed effects estimator. As an alternative, authors propose the estimation of the gravity model in levels using the Poisson pseudo-maximum likelihood estimator<sup>30</sup>. Besides tackling with the problem of heteroscedasticity of the error term, the estimator deals with the zero value observations in trade flows. Additionally, unlike to the standard Poisson approach, PPML does not require the data to be Poisson type, in other words, that it does not require the dependent variable to be an integer. Finally, PPML allows to identify effects of time invariant factors. The latter is very important feature for our analyses, since we aim to test the effects of several dummy variables indicating memberships in different regional agreements together with the time dummy controlling for the occurrence of crisis during the estimation period<sup>31</sup>. Following the contribution of Silva and Tenreyro (2006) we analyze exports of V-4 with the

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<sup>30</sup> For detailed discussion of PPML estimation of gravity equation together with using several other alternative estimation approaches, please see Janda, Michalikova and Skuhrovec (2013).

<sup>31</sup> Another possible solution to the problems identified by Silva and Tenreyro (2006) could be non-linear least squares (NLS).

rest of the world on the sectoral level based on UN Broad Economic Categories Classification (BEC) for time period 2004-2014 by the following estimation equation:

$$X_{ijht} = \beta_0 + \beta_1 \ln(Y_{it}) + \beta_2 \ln(Y_{jt}) + \beta_3 \ln |Y'_{it} - Y'_{jt}| + \beta_4 \ln(Z_{ij}) + \beta_5 D_{ijt} + \beta_6 D'_{ij} + \beta_7 T_{ijht} + \varepsilon_{ijt}$$

where  $X_{ijht}$  is the export flows of product  $h$  from  $i$  to  $j$  at time  $t$ ,  $Y_{it}$  and  $Y_{jt}$  represent the current GDPs of the trade partners at time  $t$ ,  $|Y'_{it} - Y'_{jt}|$  stands for the absolute value of the difference between the real GDP per capita of the importer and exporter countries respectively,  $Z_{ij}$  is the non-binary but time invariant information such as distance between the trade partners,  $D_{ijt}$  and  $D'_{ij}$  are the time-varying and time invariant dummy variables. Namely, as time invariant dummy variable we include contiguity which equals one when the trade partners share the common border and zero otherwise. As for time-varying dummies we introduce a dummy for the EU15 which equals one when a trade partner belongs to the EU15 and zero otherwise; a dummy for NMS which equals one when a trade partner is a new EU member state and zero otherwise; a dummy for V-4 which equals one when a trade partner belongs the Visegrad group and zero otherwise; a dummy for RTA that equals one if a trade partner is a signatory of regional trade agreements of the EU and a dummy for the former membership in the Soviet-Union that equals one if a trade partner is the former Soviet state. Finally  $T_{ijht}$  stands for simple average tariffs imposed by importer country  $j$  on the product  $h$  from exporter country  $i$  at time  $t$ . Exporter countries are V-4 countries, while as importers together with the EU countries, we take the rest of the world consisting of 234 countries in our sample. The data for the export flows in millions of Euros and simple average tariffs for BEC sectors come from World Integrated Trade Solutions (WITS) database. The data of the current GDP levels in millions and real per capita GDPs are included from the World Development Indicators database compiled by the World Bank. The data for the other variables such as distance and contiguity are taken from the CEPII database and the data for the regional agreement memberships come from the World Trade Organization (WTO). The sample covers the period from 2004 to 2014.

Table 1. Variables employed in the model

Variable Name	Description	Source	Expected sign
exports	Exports in millions of Euros for each BEC category	WITS	
lXGDP	Natural logarithm of GDP in current US dollars of a reporter country	WDI	+
lMGDP	Natural logarithm of GDP in current US dollars of a partner country	WDI	+
ldiffGDP	Natural logarithm of the absolute value of difference of GDP per capita in purchasing power parity (PPP) of reporter and partner countries	WDI	-
ldistance	Natural logarithm of geographical distance between the capital of the trading partners	CEPII	-
contig	Dummy variable standing for the neighboring countries	CEPII	+
Tariffs	Simple average tariff imposed on each BEC category	WITS	-
EU15	Dummy variable denoting the EU 15 countries among partners	WTO	+
NMS	Dummy variable denoting the new EU member states among partners	WTO	+
VIS	Dummy variable denoting Visegrad countries among partners	WTO	+
RTA	Dummy variable standing for countries that signed RTAs with the EU	WTO	+
Post_Sov	Dummy variable denoting the former Soviet states	WTO	+

Source: own compilations.

#### 4. ESTIMATION RESULTS

As discussed in the previous section, we estimate the augmented gravity model by PPML estimator, where all the variables except the dependent variable, dummies and tariffs are taken in logarithms, the latter three are taken in levels. Estimations are done for the time period after the EU accession in 2004-2014 for each BEC category<sup>32</sup> separately. Estimation results are reported in Table 2.

Table 2. Estimation results

	(BEC 1)	(BEC 2)	(BEC 3)	(BEC 4)	(BEC 5)	(BEC 6)
IXGDP	1.282*** (33.08)	0.798*** (33.68)	0.856*** (11.27)	0.335*** (11.02)	0.527*** (15.00)	0.798*** (32.12)
IMGDP	0.716*** (39.00)	0.843*** (55.03)	0.451*** (12.69)	0.919*** (39.28)	1.132*** (41.02)	0.866*** (67.88)
ldiffGDP	-0.173*** (-7.41)	-0.114*** (-5.92)	-0.113* (-2.14)	- (-3.41)	-0.165*** (-5.79)	-0.0546* (-2.38)
ldistance	-0.817*** (-16.87)	-0.859*** (-20.02)	-1.045*** (-16.24)	-0.777*** (-13.32)	-0.893*** (-16.72)	-0.685*** (-16.78)
contig	0.500*** (7.08)	0.541*** (10.27)	1.327*** (10.65)	- (-0.01)	-0.229** (-2.84)	0.0599 (1.14)
Tariffs	-0.0235*** (-4.18)	- (-5.86)	-0.158*** (-4.01)	- (-3.59)	-0.00228 (-0.24)	- (-9.07)
EU15	0.621*** (4.08)	0.510*** (4.18)	-0.232 (-0.87)	0.502*** (4.13)	1.188*** (10.14)	1.026*** (6.82)
NMS	1.233*** (5.59)	1.279*** (7.08)	-0.239 (-0.81)	0.826*** (3.98)	1.653*** (8.73)	1.671*** (7.65)
VIS	1.297*** (6.54)	1.432*** (8.91)	0.333 (1.30)	0.768*** (4.31)	1.948*** (11.35)	1.793*** (8.47)
RTA	0.122 (0.95)	0.289* (2.56)	-0.413 (-1.59)	0.350** (3.02)	0.879*** (7.78)	0.543*** (3.79)
Post_Sov	0.690*** (5.16)	0.797*** (6.30)	-0.714* (-2.27)	0.723*** (6.13)	1.086*** (6.15)	1.947*** (18.38)
_cons	-20.71*** (-31.02)	-15.25*** (-28.33)	-11.15*** (-13.37)	-11.36*** (-16.64)	-15.73*** (-23.25)	-17.98*** (-29.74)
N	3803	4666	2440	4708	4295	4568

t statistics in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Source: own calculations, Stata (2013).

As Table 2 indicates, GDP for both the exporter and importer countries yield the positive and statistically significant impacts on the exports already at the 1% significance level for each BEC sector. It is remarkable that the highest positive impact of the V-4 GDP comes on “food and

<sup>32</sup> We exclude ‘not elsewhere classified’ (nec) sectors because the “nec” sectors include relatively heterogeneous goods. (See Baldwin Baldwin, Skudelny and Taglioni (2005) “Trade Effects of the Euro Evidence from Sectoral Data”, European Central Bank working papers, No.446, page 26).

beverages” and the highest impact of importer countries’ GDP comes on “transport equipment and their parts and accessories”. GDP difference between the exporter and importer countries enters with the negative sign as expected and is statistically significant for all BEC categories. Moreover, the largest magnitude is found for “food and beverages”. This implies that export in this product category is increasing with the similarity between V-4 and their trade partners. Distance yields the negative and statistically significant coefficient at the 1% significance level for all product groups but is found to be the most binding for “fuels and lubricants”. The dummy variable standing for the neighboring countries gets the positive coefficients and is statistically significant for most of the product groups. However, striking finding refers to “transport equipment and their parts and accessories” that yields a negative and statistically significant coefficient. The latter implies that exports in this product group increase with the non-neighbor countries. Finally coefficients of tariffs enter with the negative sign as expected and are statistically significant for all BEC categories except “transport equipment and their parts and accessories”. Moreover, estimations find that mostly tariffs are binding for “fuels and lubricants”.

As for trade partners, the dummy variable standing for the EU15 countries yield positive and statistically significant coefficient for all product groups except “fuels and lubricants”. Besides, the highest positive impacts come on “consumer goods not elsewhere specified”. So, in exporting to the EU15, V-4 gain comparative advantage in “consumer goods”. Higher magnitudes are found for the coefficients denoting NMS, especially in “transport equipment and their parts and accessories” and “consumer goods not elsewhere specified”. Thus, trade partner being NMS increases exports of V-4 more than being the EU15. Although the highest positive coefficients for the same product categories, namely, “transport equipment and their parts and accessories” and “consumer goods not elsewhere specified”, come on the dummy denoting Visegrad countries. So the highest positive impacts on V-4 exports come from trading with other members of V-4.

As for the countries that are signatories of the EU agreements, we find positive and statistically significant coefficients for “industrial supplies”, “capital goods”, “transport equipment and their parts and accessories” and “consumer goods not elsewhere specified”. It is remarkable that the largest positive impacts come on “transport equipment and their parts and accessories”. Finally, the dummy standing for post-soviet countries yields positive and statistically significant coefficients with the only exception of “fuels and lubricants”. The later yields negative and statistically significant coefficient. This finding is not surprising once taking into account that exports of fuel products to the post-Soviet countries mainly come from Russia due to the soviet background. Additionally, we find the highest magnitudes for “consumer goods” and “transport equipment and their parts and accessories” implying that V-4 gain comparative advantage in these product groups when the exports are directed to the former Soviet states.

## 5. CONCLUSION

The paper aimed to investigate the structural changes in exports of V-4 after their accession in the EU. We constructed the panel data of the annual export flows of V-4 with the rest of the world for each BEC category in the time period 2004-2014. To derive plausible estimates we followed the recent findings of Silva and Tenreyro (2006) and estimated the augmented gravity model by PPML approach.

Estimation results indicated that mass economic proxies of importer and exporter countries importantly increase exports in all product categories. The similarity between V-4 and their trade partners was found mostly considerable for exports in “food and beverages”. Distance yielded most trade impeding impacts on “fuels and lubricants”. Moreover, estimations have

found that exports in “transport equipment and their parts and accessories” increase with the non-neighbor countries and tariffs are mostly binding for “fuels and lubricants”.

As for the main exporting partners in different product categories, our estimations revealed that in exporting to the EU15, V-4 gain comparative advantage in “consumer goods”. The higher positive impacts on V-4 exports come from trading with NMS and the highest - from V-4. Additionally, we found that trading with the post-Soviet countries is still important for most of product categories and V-4 gain comparative advantage particularly in “consumer goods” and “transport equipment and their parts and accessories”.

Overall our we may suggest, that in order to direct exports from other less developed trade partners to the EU15, V-4 should increase specialization on other product groups, such as industrial good, capital goods.

## LITERATURE

1. Acharya, R., Crawford, J. A., Maliszewska, M. and Renard, C. (2011), “Landscape”, in Chauffour, J. P. and Maur, J.C. (eds), *Preferential Trade Agreement Policies for Development: a Handbook*, Washington DC: The World Bank.
2. Akhvlediani, T. and Sledziewska, K. (2015) "The Impacts of Common Commercial Policy on Export Performances of Visegrad Countries", forthcoming in Prague Economic Papers, March 2016.
3. Alessandro Olper, A. and Raimondi, V. (2008), “Agricultural market integration in the OECD: A gravity-border effect approach”, *Food Policy* 33: 165–175.
4. Baier, S. L. and Bergstrand, J. H. (2009), “Estimating the effects of free trade agreements on international trade flows using matching econometrics”, *Journal of International Economics* 77, pp. 63-76.
5. Baldwin, R., and Taglioni, D. (2011), “Gravity Chains Estimating Bilateral Trade Flows When Parts And Components Trade is important” European Central Bank (ECB) Working Papers Series, No. 1401/November, 2011.
6. Baldwin, R., Skudelny, F. and Taglioni, D. (2005) “Trade Effects of the Euro Evidence From Sectoral Data”, European Central Bank working papers, No.446, February, 2005.
7. Brodzicki, T. (2011), “Structural adjustments in trade relations of the Visegrad group countries”, Proceedings of the thirteen annual conference, ETSG, 2011 - gnu.univ.gda.pl
8. Carrere, C. (2006), “Revisiting the effects of regional trade agreements on trade flows with proper specification of the gravity model”, *European Economic Review* 50, pp. 223-247.
9. Foster, N. (2012), “On the volume and variety of intra-bloc trade in an expanded European Union”, Workshop on “Revival in the ‘Visegrad Countries’ Mutual Trade after their EU Accession: A Search for an Explanation”, Vienna Institute for International Economic Studies, Monthly Report No. 8-9, September 2012, pp. 1-6.
10. Ghosh, S. and Yamarik, S. (2004), “Does trade creation measure up? A reexamination of the effects of regional trading arrangements”, *Economics Letters* 82, pp. 213-219.
11. Grossman, Gene M. and Esteban Rossi-Hansberg (2008). "Trading Tasks: A Simple Theory of Offshoring," *American Economic Review*, vol. 98(5), pages 1978-97, December.
12. Helpman, Elhanan and Paul Krugman, (1985), *Market structure and foreign trade*, MIT Press.
13. Hornok, C. (2010), “Trade enhancing EU Enlargement and the resurgence of East-East Trade”, *Focus on European Economic Integration*, Austrian National Bank, Vienna, pp. 79-94.

14. Hummels, D., D. Rapoport and K-M. Yi (1998), "Vertical Specialization and the Changing Nature of World Trade", Federal Reserve Bank of New York Economic Policy Review (June): 79-99.
15. Hunya, G. and Richter, S. (2011), "Mutual trade and investment of the Visegrad countries before and after their EU accession", *Eastern Journal of European Studies*, vol 2, Issue 2, December, pp. 77-91.
16. Janda, K., Michalíková, E. and Psenakova, L. (2013), "The performance of export credit agencies in post-communist Central European countries", *IES Working Paper*, No. 10/2013.
17. Janda, K., Michalikova, E. and Skuhrovec, J. (2013), "Credit Support for Export: Robust Evidence from the Czech Republic", *The World Economy*, Wiley Blackwell, 36, pp. 1588-1610.
18. Kimura, F., Y. Takahashi and K. Hayakawa (2007), "Fragmentation and Parts and Components Trade: Comparison between East Asia and Europe", *The North American Journal of Economics and Finance*, 18/1: 23-40.
19. Li, Y. and John C. Beghin, J., C. (2012), "A meta-analysis of estimates of the impact of technical barriers to trade", *Journal of Policy Modeling* 34: 497–511.
20. Magee, C. (2008), "New measures of trade creation and trade diversion", *Journal of International Economics* 75, pp. 340-362.
21. Qineti, A. and Smutka, L. (2011), "The Agrarian Trade Transformation in the Visegrad Countries", EAAE 2011, ETH Zurich, Switzerland.
22. Silva, J. M. C. S. and Tenreyro, S. (2006), "The Log of Gravity", *The Review of Economics and Statistics* 88, pp. 641-658.
23. Soloaga, I. and Winters, L. A. (2001), "Regionalism in the nineties: what effect on trade?", *The North American Journal of Economics and Finance* 12, pp. 1-29.
24. Tinbergen, J. (1962), "Shaping the world economy suggestions for an international economic policy", New York: Twentieth Century Fund.
25. Vanek, Jaroslav (1963). "Variable Factor Proportions and Interindustry Flows in the Theory of International Trade," *Quarterly Journal of Economics*, LXXVII (Feb. 1963).
26. Yi, K-M (2003). "Can Vertical Specialization Explain the Growth of World Trade?" *The Journal of Political Economy*, Vol. 111, No. 1 (Feb.): 52-102.

## PRIVATIZATION METHODS IN KOSOVO

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### **ABSTRACT**

*Through the establishment of the Kosovo Trust Agency as the supervisor of the Socially Owned Enterprises, the conditions to start the privatization in Kosovo were created. The international structures that were administering Kosovo chose a special privatization model known as Spin off and another sub-type known as Special Spin off. For the potential disputes from this field, the Special Chamber within the Supreme Court of Kosovo was established. Also, the sub-normative acts were approved, respectively the Operational Policies.*

*The process has been accompanied with many obstacles and problems, especially at the beginning when interruptions and delays occurred. The period between 2004 and 2008 was a dynamic one and a more efficient privatization took place. After the declaration of independence, the process was slowed down and recently it was almost completely interrupted. The privatization methods applied in Kosovo are being regarded as the right ones and the effect of the privatization in the economic development is not noticeable.*

*To eliminate the obstacles and many dilemmas that occurred as a result of the difficulties in understanding the nature of the social property and Serbia's requirements as a claimant of the ownership towards this property in Kosovo, the need to adopt a number of Regulations, including the Regulation on Business Organizations, Regulation on KTA, Regulation on the Use of Land and the Regulation on Establishing the Special Chamber within the Supreme Court.*

*After the successful first and second round of privatization, in the third round the process was interrupted for the sake of the consultations in New York, to resume again after a considerable delay.*

*Failing to define the real owner and the status of the sold property is in contradiction with the programmed objectives from the international state makers for the definition of the legitimate owners. Especially, lack of clarity was upon the lands, where the SOEs were located. The solution has been asked specifically in this manner: when the assets of the SOEs are sold, the land will be rented out for up to 99 years.*

**Keywords:** Agency, Enterprise, Spin-off, Privatization, UNMIK, KTA.

### **1. INTRODUCTION**

After the installation of the UN Mission in Kosovo known as UNMIK and after the establishment of the Provisional Self Government Institutions, the preparations for the transition process in Kosovo started, where privatization had a key role. For this purpose, a special institution known as Kosovo Trust Agency /KTA/ was established.

Responsible for the management of the social property and for the economic development was Pillar IV of UNMIK. UNMIK had the authority to adopt the Regulations and to determine what the applicable law was. The Head of the Pillar IV was at the same time Chairman of the KTA Board.

Before the commencement of the privatization process, the legal acts and the Operational Policies document that determined the privatization methods in Kosovo stipulated the rules for the process and work of KTA.

To eliminate the obstacles and many dilemmas that occurred as a result of the difficulties in understanding the nature of the social property and Serbia's requirements as a claimant of the

ownership towards this property in Kosovo, the need to adopt a number of Regulations, including the Regulation on Business Organizations, Regulation on KTA, Regulation on the Use of Land and the Regulation on Establishing the Special Chamber within the Supreme Court. After the successful first and second round of privatization, in the third round the process was interrupted for the sake of the consultations in New York, to resume again after a considerable delay.

## 2. SPIN OFF METHOD

After the promulgation of the UNMIK Regulation No.2001/9 issued on 15th of May 2001, for the Constitutional Framework for Provisional Self - Government in Kosovo, after the establishment of the Provisional Self - Government Institutions and after the promulgation of the UNMIK Regulation No.2002/12, adopted on 13th of June for the establishment of Kosovo Trust Agency (KTA), the conditions to commence the privatization process in Kosovo were created.

According to these legal acts, the management of the social, public and state property is the competence of the Special Representative and the transforming property procedures are also a reserved competence of UNMIK and SRSG. Kosovo Trust Agency was established through the consultations with international and domestic institutions with the obligation to administer the Public and other Enterprises. Regarding KTA, in a more detailed manner, we'll put it down through a special part of this paper.

KTA supervises the Socially Owned Enterprises even though they continue to be managed by the existing structures. UNMIK and Pillar IV chose a special privatization model for Kosovo to continue the process. This model was known as Spin off and another sub-type as "Special Spin off". According to this method, the KTA, out of the existing SOEs (or on their behalf) establishes one or more shareholding companies with limited liabilities. The property rights upon the SOEs as well as the profit from them are transferred to these companies as well. The new enterprise holds the shares of the SOE. KTA holds the right to sell or alienate the shares of the New Company (or or enterprises). The revenues collected from the sale of the shares are kept in the Trust Fund at KTA for the interests of the SOEs and of the Creditors (if there was any). It should be clarified that the remaining SOE holds the burden and the problems from the past. In fact, after the transfer of the shares, it has been prepared and liquidated through a special procedure. This form of privatization of the SOEs has been used in Kosovo, whereas the public and state enterprises have not been privatized, but remained under UNMIK (KTA) administration.

The rules and the applied model in Kosovo have been drafted in such a way that the privatization in order to avoid the obstacles occurring from different ownership claims - here we are talking about the claims coming from Serbia, which considered Kosovo as its own part, whereas the Kosovo property as its own. This situation, in the international aspect was strengthening the UN Administration in Kosovo from any potential responsibility, since Kosovo's political status was not defined yet. So, "this special procedure was conducted in order to enable the review of any claim submitted afterwards against the enterprise, until the privatization goes on, through establishing the new company with the capital of the old one's (Spin off), through holding the means from privatization and through establishing the Special Chamber in order to handle any legitimate claim from the third party claimants. Also, most of the judges in the Special Chamber were internationals and were delivering the justice".

But, "in the spirit of the intense debate about the final status of the enterprises in Kosovo, it is interesting that Spin off left the ownership undefined: Why the ownership after privatization should be clear against the one which was before the privatization... This lack of clarity has been created intentionally from the international state makers".



Failing to define the real owner and the status of the sold property is in contradiction with the programmed objectives from the international state makers for the definition of the legitimate owners. Especially, lack of clarity was upon the lands, where the SOEs were located. The solution has been asked specifically in this manner: when the assets of the SOEs are sold, the land will be rented out for up to 99 years. According to this author, the privatization legal framework designed by the international competent authorities (UNMIK) leaves the issue of the land undefined, especially the ownership of the land, which is separated from the other assets of SOEs. When there is a lease for a land taken for usage purposes, then necessarily there should be a lessee. It seems that they found this solution through an undefined manner that should be defined together with settlement of the status of Kosovo.

An affirmative opinion about this model, we find at the Roundtable Discussions, according to which the Spin off has some advantages comparing to some other choices. Lack of the resources for capital investments and technological regeneration, human resources, markets, all are limiting factors for the SOEs, thus through the promulgation of the Regulation on Business Organizations and Regulation on KTA, in order to set up a respective institutional environment, they present a chance and a possibility to attract potential investors. After the establishment of KTA, the Special Chamber has been established within the Supreme Court for the KTA matters. For the commencement of the privatization, it was necessary the approval of the "Operational Policies" - procedures and adoption of the Regulation on the Land Use. These have been promulgated in 2004, but extended obstacles and delays have been caused due to the need for continuous consultations with UN Legal Office as well as waiting for the approval of the regulations and decisions from their side. Quite some time was spend for the consultations with municipalities for finding a solution between the municipalities' insistence to manage the lands of SOEs as well as about the KTA's right to privatize those. Meanwhile, the consent of UN was acquired for the right of employees employed in SOEs for the distribution of the 20 % from the value of sale.

In May 2003, the privatization program began. At this time, the First Round was announced for the privatization of seven Socially Owned Enterprises. There were 22 offers submitted within the announced deadline. The value of the winning offers for all these enterprises was 4.6 million Euro. It seemed like a great start. Then, it stimulated the KTA which prepared the Second Round for the privatization of 20 new enterprises. During this round, the offers were pretty attractive since there were 120 offers received, including 23 offers from the international investors. The value of the winning offers from this round was 24,7 million euro.

Motivated from this great start, KTA prepared to tender out 158 enterprises and solved the dilemmas about their potential transformation in the 90s. The KTA Board out these enterprises, recognizes 64 of them as new enterprises and approved them for the tendering procedures. KTA had prepared a plan, which aimed to tender and liquidate 25 enterprises a month.

On 10th of September, the Third Round of privatization was announced. To everyone's surprise, the Chairman of the KTA Board who was also the Head of the UNMIK Pillar IV, canceled this privatization round on 6th of October under the justification for the review of the privatization legal framework. It seems that the clashes between KTA Board members (three ministers and the trade unions' representative of Kosovo) on one hand and the international members on the other hand resulted with delays and disagreements and brought the process to zero. It took six months for the consultations in the UN Headquarter to resume with the announcement of the Third Round and approving the sale contracts from the First and Second Rounds. However, this Board's decision has been implemented according to the schedule and practically the process was interrupted. After the consultations with the Legal Office in New York, it was concluded that the privatization may resume according to the applicable Regulation, whereas from the group of the discriminatory laws of Serbia in 90s, excluding three laws for the cases when the

transfer has been done in a nondiscriminatory manner. Therefore, from now on the process resumes with the amended Regulation, taking into account the transformations occurred before the war, in cases when they have been conducted pursuant to the non-discriminatory laws and in a non discriminatory manner. Even after this, the disagreements between the Governmental Institutions and Internationals got worsen. The process was interrupted and KTA failed to perform its basic function it was established for; protection from degradation, increasing the value and economic efficiency. As a consequence, despite the losses from non activation, degradation and the problems with the employees in the Socially Owned Enterprises, decreased value of the assets and discouragement of the investors caused an incalculable damage for the economy of Kosovo. It produced delays in the commencement of the reforms and ensuring of the social stability of the country. Especially with regards to the damage of the country's image and in attracting foreign investments, delays in implementing the standards for Kosovo as a criteria set by the international community to define the political status of Kosovo, disruption of the relationships between the governing poles of the country and the interference of Serbia in the process.

About the results from the attempts for privatization during 2003 until the temporary interruption, the best way to draw them out are the conclusions from a paper prepared by the Round-table Discussions titled: "Privatization in Kosovo, advances and stumbles" where it states the following: "During tenders, there have been 26 enterprises sold with a value up to 29.355.070 euro. Out of the 6 potential buyers, five contracts have been signed (four have been ratified by the Board) for the first round of tenders, whereas for the second round, out 19 enterprises, 11 contracts have been signed so far. Contracts have been signed with a three months delay. The KTA Board had not ratified 12 signed contracts. All the buyers have paid the stipulated price, besides from five enterprises, where the winners were withdrawn and negotiations started with the second best bidders. Two Buyers withdrew the money they paid (Përparimi 2,298 million euro and Plastika 2.875 million euro) due to the prolongations after the tender was awarded. Three commercial banks had credited the investors for the first and second round with a value up 8,5 million euro. Banks complain about the general situation with regards to the privatization process, which according to them had negatively impacted the crediting process".

In April 2004, KTA, the Privatization Department drafted the Privatization Strategy of Kosovo which aimed to complete the privatization of SOEs in a transparent and efficient manner in order to use more efficiently the assets to encourage a more dynamic private sector development.

In this document, the situation of 500 Socially Owned Enterprises and their structure is described. This document sets out that these enterprises made up 90% of the industry and mines in Kosovo about 50% of the market spaces for retail sale and 20% of the agriculture land of Kosovo as well as the most qualitative forests in Kosovo. Further more, the document specifies that besides some Socially Owned Construction Enterprises, who had recovered their economic activity as a result of the support from donors in reconstruction of the houses and buildings destroyed during the war, in all the other Socially Owned Enterprises, their assets have been destroyed and degraded, while their agriculture lands have remained unused. The forests have been cut ruthlessly".

Due to the disappearance of the documentation and legal uncertainties regarding the definition of the social property, the Privatization Department was unable to identify exactly the number of SOEs. In the document it is stated that there are 450 identified SOEs and have been put under the administration of KTA, whereas 50 new enterprises according to the incomplete documentation, might have been transformed into shareholding companies through the sale of the shares to their employees. Around 130 small enterprises, due to the unclear data, do not

have a clear status, it's not clear whether they have the status of a SOE or of a private company. Therefore, the Privatization Department of KTA has identified as the potential SOEs for privatization based upon the applicable laws, Law on KTA and Law on the Special Chamber, 450 Socially Owned Enterprises.

75% of the Socially Owned Enterprises were active and employed a small number of employees with a small percentage of production. Mainly, the assets of the enterprises were leased to the private enterprises and third parties that were used for other purposes they were designed to. Moreover, through a cooperation between international institutions that administer Kosovo, Government of Kosovo, Civil Society, business community, trade unions, etc. a full consensus and deep belief that the full privatization is the only way for transformation, economic efficiency, employment and economic development.

According to the Privatization Strategy, it is estimated that there are three causes for the interruption of the privatization process in October 2003. The new UN Guidelines with regards to the status of SOEs (documents are required to prove that an enterprise is really an SOE). The delay of UNMIK in finding a way out of the liquidation process for SOEs that own land in Kosovo and the demands of the new merchants for the change of operational policies with regards to privatization.

The KTA privatization team came up with conclusion that resumption of the promulgation of the regulations and procedures does not go in favor of the active policies for privatization and liquidation of the SOEs.

In a round-table of discussions, it is estimated that: "The interruption and prolongation of the resumption of privatization is creating huge difficulties in implementing the economic reform and in changing the socio-economic situation in the Kosovar society". Especially damages have been caused by the interruption of the implementation of the Standards for Kosovo. As we know, the Standards for Kosovo were determined by UN and are focused in eight fields, whose fulfillment was related and conditioned with the definition of the final political Status of Kosovo.

The interruption has caused damages through discouraging the potential foreign investors, and through damaging the image of Kosovo, the business community has been discouraged as well as the initiative for investments. This situation has negatively reflected in achieving the objective in reconstructing Kosovo as modern country with a market economy. A huge number of problems couldn't be absorbed from the weak institutions in the sphere of economic policies. Particularly, the negative effect has reflected more to the Buyers in the first two tenders with the delay in redrafting the contract and as a consequence the delay in transforming the social property into private property. First installments of the new Owners started to be canceled for purchasing these enterprises. Later, those Socially Owned Enterprises had their economic activity interrupted and on the other hand it was not possible for the Buyer to start operating with these enterprises. And the third negative effect was related with the employees of these enterprises, which were dismissed and didn't get the 20% of the financial means that they were entitled to as former employees. Thus, the social situation got worsen.

The interruption of the privatization process, lack of communication between KTA and domestic institutions and especially the worsening of the relations between the main assets in this process, became a serious obstacle in implementing the privatization process.

Some dilemmas and hesitations from SRSG and KTA about the resumption of the privatization process and insistence in amending the operational policies, apparently were influenced from the demands of the Serbian government that had been rejected earlier. These demands and their influence politicized the privatization process and increased the Serbian appetites to put under its control the assets of Kosovo and at the end, they were an obstacle for Kosovo in continuing the reforms for economic development.

### 3. SPECIAL SPIN OFF METHOD

If the KTA Board deems that an SOE is important for three economic development since it belongs to a certain branch or to a key economic sector of the country or region, that employs a considerable number of people and that it has a favorable position in the market, it means that if it does have a respected name, then, that SOE is privatized through the Special Spin off. Under UNMIK Regulation 2002/12, it is provided that the Agency Board "Created circumstances, under which the Agency may ask parties who have competed for that corporation, including the proposed activities, investments and the level of employment as well as the proofs for the financial means needed for the envisaged investments in the business plan, and to specify that during the tender evaluation, these criteria are taken into account by the Agency".

The Special Spin off privatization, besides the normal requirements submitted for privatization of the incorporated enterprises to the the Agency, it requires additional conditions for the bidders with regards the commitments for the investments, employment and the business plan. Besides these requirements, in specific cases, it might be asked to bring the proof for sufficient experience for the incorporated enterprises, where is a need for an operating license, the proof for the qualification from where it should be transferred or re-licensed. Under the tender rules, it is determined that for any commercialized enterprise, the specific approval from the KTA Board of Director is needed. According to the rules of the tender for Special Spin off, the bidders should guarantee the employment of a certain number of employees, payment of taxes and for a number of employees, the incomes for a certain amount before privatization.

There may be an exception if this is approved by the KTA Board upon the proposal of any of its own members, in case a corporation enterprise is important for the country's economy, this means that there may be exceptions from the specific requirements. In these cases, the Board authorizes assessments with regards to these special spin offs. Assessments should be conducted by specialized institutions or by the domestic or international experts. These assessments are not mandatory for the Board and are not published but they only help for the evaluation of the offers. If in the regular spin offs, the offer with highest bidding price is the winner, at special spin off, besides the price, the bidders should present even the a) Projects for the offered investments; b) the business and the intensive plan; and c) other additional requirements as determined by the management and approved by the Board.

An incorporated enterprise may be privatized through the special spin off, if any of these criteria is fulfilled: a) If there has been employment and regular salaries and tax payments for the personal incomes for three months (starting from 1 September until 30 November 2002 for at least 300 employees) or if b) in 2002 it has had a turnover for at least 10 million euro. Exception form these criteria may be only for some enterprises that have an extraordinary impact in the economy of Kosovo and as such it has been approved by the KTA Board.

Within the reviewed period, through the special spin off, there have been 26 enterprises privatized. Enterprises "Mineks" and "Jugoterm" have been tendered in previous rounds, but due to the appeal process at the Special Chamber until the closure of this process, the signing of contracts has been delayed. The committed value for the investments from all these contracted offers goes approximately up to 200 million euro, from which 171 million result as collected, whereas for the 8622 jobs committed, 7257 have been realized, respectively 84% of the commitments. For the period until June 2008, from reporting and monitoring, 6 enterprises have been released: "Banja e Kllokotit" (Vitia), "Ferronikeli" (Drenas), "Fabrika e tullave" (Gjakova), "Birraria" (Pejë), "Ballkan" (Suhareka), "Modeli" (Gjakova) since they fulfilled their contractual obligations. According to the data from the KTA Report 2008, these enterprises have invested 66.991 thousand euro and have employed 3071 persons, According

to the Audit Report, the New Enterprises “Banja e Klllokotit”, “Ferronikeli”, “Fabrika e tullave” and “Birraria”, besides the fulfillment of their contractual obligations, they are performing successfully in business terms even for the country’s economy and in their sectors they are leading the economic activity. “Ferronikeli” through its products and exporting them in foreign markets has improved the exchange trade balance with other countries for Kosovo. However, even in the group of these enterprises, there are problems, especially the distinction between the reported amount and the one verified by the auditor. This is noticeable especially at “Ballkani” and “Modeli”. Also, the latter one has not fulfilled its contractual obligations since it has employed seasonal and not regular employees. Also, this enterprise had not started the production process until June 2008. The rest of the enterprises that are under PAK monitoring and that have been privatized through the special spin off method, are facing problems and difficulties. Thus, for instance Fan-Podujevo has realized only 42% of the investments, “IDGJ Duhani” 19%, “Mulliri & Sillosi” 100%, “Veraria” Rahovec 108%, “Mulliri” Fushë-Kosovo 83%, “Fabrika e gypave”- Ferizaj 18%, Hoteli “Iliria” 78% , NBI “Suhareka” 6%, “Tullara” had no commitments for investments, “Fabrika e bukës” Ferizaj 19%, “Kosovatek” 34%, “Grand Hotel” 15%, “Magneziti-Strezovc” 7%, “Magneziti-Golesh” 8% and “Llamkos” 10%. These enterprises until June 2008 had realized investments for an amount up 35.224 thousand euro, or 23.8% of the contractual obligations and had employed 3428 persons, or 74.1% of the mandatory number as stipulated under the contract. This group of enterprises can not be considered as success story due to the failure to achieve the volume of the investments and the number of the employees. Regarding the number of employees, some enterprises hold the evidence for a certain number of employees that are paid with minimum wages (80 euro) per month due to the fact that, the investments haven’t been completed yet or they haven’t started with the production process yet. Also, we should mention the fact that some enterprises such as: “Llamkos” from Vushtrria, after failing to fulfill its contractual obligations, shares have been withdrawn and the enterprise has been tendered again. Also, while we are writing this paper, shares of the owners of “Hotel Grand” in Prishtina have been withdrawn from PAK, therefore the process has been transferred to the judicial process due to corruption affair and the tragic case (suicide) of the Chairman of PAK Board. With regards to the problems that occur to the privatized enterprises through the special spin off, I managed to get a declaration from one of the shareholders of the enterprise “Jugoterm”- Gjilan, which after the tender procedure, was subject to the contested procedure, that took 6 years and at the end, the contract was signed in April 2012. In its statement, one of the owners declared: “as a conclusion, we can certify that this method has not produced the expected results, as an exception this method contains in itself elements of social policies, since the investors are obliged with mandatory investments and employment, but it does not require them to perform upon market terms. It should be reemphasized that these enterprises were chosen as the most powerful enterprises and with the highest value of assets in the market”. As stated above, in none of the determined specifics in their assessment as a group, the contractual obligations have not been fulfilled, individually few enterprises may be considered successful. However, in general, this group of the privatized enterprises through this method results to be unsuccessful and as such have not met the expectation.

#### 4. CONCLUSION

Privatization in Kosovo has started after many other countries. It has been considered a necessary process and as such it has been considered as the opportunity to start the dynamic economic development of the country.

Privatization in Kosovo has been realized in specific conditions, not only in terms of the model used for privatization, but even because Kosovo has started this process under the United

Nations administration. Also, Kosovo has started with this process at the same time with the reconstruction phase from the war and rebuilding of the institutions and the legal infrastructure. Two periods of this process do not differ much with regards to the method and implementation manner. The first period led by UNMIK until 2008 differs from the second period led by the domestic institutions after the declaration of the independence only by their dynamic. For the last two years, the privatization process has been ignored from the governing institutions, whereas the Privatization Agency of Kosovo has become almost completely non functional. The expectations from this process have not been realized even closely. Economic experts consider it as failure due to its effects in the economic and social development of the country.

## LITERATURE

1. Berisha, A. D. (2012). *Privatization and Performance of the Enterprises in Kosovo*. Prishtina: RINVEST.
2. Cemovich, R. (2001). *On Analysis of UNMIK Regulations and Pre-existent Yugoslav Laws Related to Agricultural Land Privatization/Commercialization in Kosovo*. Prishtina: International Fertilizer Development Center and USAID.
3. Demekas, D. D. (2002). *Kosovo: Institutions and Policies for Reconstruction and Growth*. Washington, DC: International Monetary Fund.
4. Dérens, J.-A. (2003). *Reconstructing states: Protectorate of Kosovo*. Le Monde diplomatique.
5. Ehite, O. C. (2002). *Factors of the success or failure of the privatization of SOEs in Kosovo*. Prishtina: RIINVEST.
6. Forumi 2015. (2008). *Privatization and post privatization in Kosovo*. Prishtina : Forumi 2015.
7. Frye, B. (2007). *Kosovo: Buried Treasure*. Transitions Online.
8. García-Orrico, D. (2009). 'Kosovo', in *Security Council resolutions under Chapter VII: Design, Implementation and Account - abilities*. Madrid: FRIDE (Fundación para las Relaciones Internacionales y el Diálogo Exterior).
9. Gashi, H. (2011). *The legal conflict regarding the privatization of socially owned enterprises: Amendments to the Law on the Special Chamber of the Supreme Court, the Law on PAK and other relevant laws*. Prishtina: Institute for Advanced Studies GAP.
10. Gould, J. A. (2007). *Privatization and Political Institution Building in Kosovo and Bosnia & Herzegovina*. Washington DC: IREX (International Research & Exchanges Board).
11. Hamidi, L. (2009). *Elections pave way for Kosovo privatesations* . Prishtina: BIRN.
12. Hashi, I. (2004). *Privatization, Increases and Decreases*. UK: Forumi 2015.

13. Ignatieff, M. (2003). *Empire Lite: Nation-building in Bosnia, Kosovo and Afghanistan*. London: Vintage.
14. Kastrati, I. (2012). *Rrënimet dhe rimëkëmbja e Kosovës: 1998-2005*. Prishtina: Oda Ekonomike e Kosovës.
15. KIPRED. (2005). *THE UNITED NATIONS MISSION IN KOSOVO AND THE PRIVATIZATION OF SOCIALLY OWNED PROPERTY: A critical outline of the present privatization process in Kosovo*. Prishtina: Kosovar Institute for Policy Research and Development.
16. Knudsen, R. A. (2010). *Privatization in Kosovo: The International Project 1999–2008*. Oslo, Norway: Norwegian Institute of International Affairs.
17. Kosovo Privatization Agency. (2002). *Operational Policies of the KTA*. Prishtina: Kosovo Privatization Agency.
18. Kosovo Privatization Agency. (2009). *Working report August 2008 - August 2009*. Prishtina: Kosovo Privatization Agency.
19. Luboteni, G. (2002). *Kosovo's banking system and opportunities of his own to contribute to the process of privatization*. Prishtina: RIINVEST.
20. OSCE. (2008). *Legal Review of the KTA matters by the Special Chamber of the Supreme Court*. Prishtina: OSCE-Monitoring Department.
21. RIINVEST. (2004). *Social Enterprises and their Transformation*. Prishtina: Institut for Ekonomik Research RIINVEST.
22. Selmanaj, S. (2006). *Globalization and Transition-dilemmas and Challenges*. Prishtina.

## MODERNIZED POVERTY OR SOCIAL CONSTRUCTION OF DEPRIVATION

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### ABSTRACT

*Poverty is a recurrent phenomenon, its permanence as a subject of study proves it. The market evangelists' breach with the values of ancient societies was responsible for the advent of a new form of poverty, « a modernized poverty » unrelated to poverty under its Arab-Muslim, Greek or vernacular form. This new version of poverty is the fruit of the pressure and frustration conveyed by the economization of human societies. The modernized poverty flourished with the advent of the phenomenon of globalization. It is currently the art of under-developed countries as the counterpart of integration in the "planetary village" for these same countries is synonymous with the breach with the lifestyle of ancient societies.*

*The present paper is meant to highlight deprivation in the era of successive crises and the questioning of the single-minded approach so dear to the market evangelists. This work is the fruit of a series of observations combined with a heterodox analysis of poverty and deprivation. We endeavoured to underline the nature of the poverty-growth causality. Is growth indeed synonymous with the decline of deprivation? Is economic growth actually beneficial to the poor? Shall we witness the advent of a new version of deprivation as a result of non-adherence to or rather exclusion from a dominant life standard?*

**Keywords:** *Poverty, deprivation, market, despotism, growth, development, misery*

### 1. DEVELOPMENT: THE STORY OF A NEW POVERTY

A lot has been said and written about development, this newcomer which was initially supposed to serve the cause of the victims of social and economic discrimination, in particular, those impoverished by colonial regimes. The myth was so tenacious in the minds of its promoters that fifty years after the introduction of the word and despite all the evil it caused to millions of poor people in terms of displacement and impoverishment the Heads of States did not refrain from reaffirming unanimously before the UN Assembly their staunch commitment to development programs. These evils, euphemistically called *repercussions* or second or collateral effects, have been studied and their manifestations so apparent.

We deemed highly important to highlight two significant facts: the preponderance of development in the dominant jargon related to poverty; and its key role in the process of colonising the contemporary imaginary.

If, since its inception, the concept of development has enjoyed a near unanimous support, it's because it was indeed at the convergence of three change conceptions emanating from different sources: the neo-colonial new powers, the ruling class of the countries concerned and the people of these same countries.



For its western promoters, it represented the ideal mask to restore life to the colonial enterprise under a neutral and promising name. In the same time it embodied the vitality and intelligence of a dynamic economic system in quest of satellite nations all over the independent countries to offer them to open up a new page of "cooperation".

The novelty of the approach was in the idea of "partnership" destined to meet the defined needs of the "poor" countries, which could give the illusion that now they actually partake as peers in the making of the big decisions about their future.

For the ruling classes of this "Third World", the idea represented the hope to join the club of the rich, but also an opportunity to convince their people that the time had come for all to experience the promises of economic abundance shared.

For the displaced and dispossessed of their wealth by centuries of colonial domination, it meant finally the hope to regain their rightful place.

In the so-called poor countries, the word development has yet served to subtly colonize the elite in the first place, and then the entire population. The elite began to accept, often without any reserve, the social policy proposed by northern economies. Then, this elite was used as a relay to convince the locals in a language adapted to the national conditions. What was the substance of their poverty and what were the most appropriate types of interventions to stop this condition?

In fact, the most tangible result of development programs in the north as well as in the south was to deprive the poor from the means to self-counter the new miseries and to install the new winners in decisive control positions.

In southern countries, these positions allowed the local rulers - especially those who followed the first generation of nationalist and anti-colonial combatants - to sell at the lowest price the human and natural resources in exchange of aid programs aimed mostly at consolidating the interior colonization of the country by the same rulers.

These Third-World re-colonization processes were largely promoted by the new development language. It is development which introduced the idea that some countries are now declared "poor" and "under-developed". Why? What's the criterion? Simply, because they lacked the necessary economic resources and poverty was generally and essentially an economic problem. The international aid would profit the countries contingent upon a scale of the different national revenue levels. As less developed countries are eligible for more aid, some governments went so far as to claim themselves *as the least developed countries*.

To streamline the fight against poverty and ensure consistency between objectives and intentions, which are often contradictory, the same language has introduced a whole vocabulary around the notion of "priority". The first of them deals with the creation of the necessary institutions and national senior officers for development and infrastructure essential to the practice of "national sovereignty". While entire populations were systematically impoverished and deprived of livelihood, a significant share of national resources was thus directed towards the "priority" needs of the States, on the one hand to strengthen the armed forces, the law enforcement institutions and the bureaucracy; and on the other hand, to direct all the productive capacity of the countries to exportation in order to repay some of the debts of the financial, economic, military, technical aid, etc.

Thus, in the name of development and the fight against poverty, most of the countries declared poor or underdeveloped turned quickly into zones of influence for the economic and political powers that became their donors and protectors. This is where the dominant language under the cloak of humanitarian action and cooperation helped establish a globally new modernized form of slavery. Whether at the individual level or at the national level, the social construction of poverty at the global scale serves loyally the cause of a productive system favourable to the interests of the rich and the ruling class rather than that of the poor it claims to help. It is the

same language that made it possible and whose condescending accents stigmatize the poor as useless individuals and social parasites producing nothing and asking for more. It is a language that transforms all those rejected by modern economy, whether individuals or entire nations, into "to-be-assisted" bodies, unable to take care of themselves.

A perfectly binary language that strips them of their power of decision as it pushes them whether to take the risk of displacement in order to enter the world of "progress" (and most will be condemned to modernized poverty) or to return to their roots in a land that successive colonizers depleted, drained or polluted. This supposedly scientific and humanitarian "Newspeak", blind to the true dimensions of poverty, is even less able to help the poor fight against the socially manufactured needs that the global market make them covet, that it has become itself a major cause of immiseration.

The noose that is tightening worldwide around hundreds of millions of poor people is, therefore, not the result of a lack of "development" or "economic growth". Certainly, the material dimension of poverty remains an undeniable concern. But the history of the last two centuries proves, alas, that the highest growth rates have nowhere been able to properly address the real issues, including at the material level.

For the evangelists of the market, the removal of trade barriers is one of the most crucial measures that governments can take to give poor countries better access to global prosperity. Moreover, the report of the World Bank published in 2009 concluded that *"openness is why globalization leads to growth and reduces poverty faster in countries."* In other words, integration through trade and openness are almost an automatic guarantee of speedy growth and reduction of poverty. Faced with this determinism, some voices rose to denounce reductionism of the approach adopted by ultraliberals.

The question that arises at this level is: Does liberal globalization really benefit the poor?

Between 1998 and 2008, the incidence of poverty in the world has declined at a rate of 0.2% per year. The already huge income inequalities have merely widened. In the late 2000s, high-income countries with 14% of the world population were sharing over three-quarters of the world income<sup>33</sup>. In the late 90s, the world economy was more unequal than any national economy since then. Some economists argue, without any credible evidence, that the incomes of the rich and the poor are starting to converge.

There is no more doubt that international trade boosts income inequality. As exports are growing faster than world GDP, they have a more important effect on the distribution of income. The shares of world trade are like patterns of income distribution. At this level, it should be noted that for every dollar linked to exports, \$ 0.75 goes to the richest countries in the world and about 0.03 to low-income countries. According to Kevin Watkins, senior adviser to Oxfam, *"as long as developing countries do not receive a larger share, trade will continue to contribute to the widening of income gaps in absolute terms."*<sup>34</sup>

It is, therefore, obvious that we go awry when we assert that the incomes of the poor rise consistently with growth and economic openness, as Amartya Sen indeed confirmed in his book "Rethinking Inequality". For him, countries where income inequality is low can expect much higher levels of poverty reduction than those where inequality is high.

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<sup>33</sup> These figures come from a report published by the World Bank in 1999, « True World Income Distribution, 1988 and 1993 », p. 73.

<sup>34</sup> International Monetary Fund, «The physiognomy of global integration», *Finance & Development*, March 2002.

Openness as such is therefore not really a strategy to fight poverty. Strategy Documents for Poverty Reduction (SDPR)<sup>35</sup> prepared by governments that were committed to programs supported by the IMF and the World Bank provide an excellent opportunity to devise an approach to the trade policy really focused on poverty. However, most SDPRs do but repeat the conventional wisdom about the virtues of free trade. These hypotheses that inspire government actions often have serious consequences for poverty reduction. For example, Cambodia's SDPR forecasts a quick general liberalization of imports, with the lowering of customs duties to an average of 5%, even for sensitive agricultural products such as rice. Yet, in a country where a third of the population lives below the poverty line, the SDPR contains no assessment of the consequences of such measures for the distribution of rural incomes while rice is the very pillar of both the rural economy and society.

The belief that sustained growth is synonymous with declining poverty is therefore subject to serious criticism. The opposite is true, however, because deprivation in its western version is rather a result of liberalization that wants to be blind to the markets which cause the ever increasing exclusion of populations that are victims of a growing economization of the societies they belong to. The same view was underlined by the proponents of this approach in terms of modernized poverty.

During the 50s and 60s, the World Bank financed primarily equipment (roads, railways, power plants, ports, telecommunication, etc.). It stipulated that the endowment of a country by a good infrastructure network stimulates development. Thus, it refers to the theory of the trickle-down effect commonly called economy of repercussions. For experts of the World Bank, the best way to help the poor is to promote growth. *"They have faith in the economy of repercussions."* The benefits of growth, they say, eventually cascade to the poorest. Yet in England, in the nineteenth century, pauperism increased while the whole country was getting totally enriched. In his famous book *"Globalization and its Discontents"* Joseph Stiglitz points out that *"it is true that we cannot achieve sustainable poverty reduction without strong economic growth. But the opposite is not true. If there is growth, there is no guarantee that it should benefit everyone. It is not true that "a rising tide lifts all boats." Sometimes when the tide comes in quickly, especially in bad weather, it projects the frailest boats against the rocks of the coast and shatters them."*<sup>36</sup>

Therefore, it turns out that the illusions raised by the language of the dominant institutions have already transformed many victims of modernized misery into agents of their own downfall, even into violent actors with sterile and self-destructive behaviour. The last four decades have unfortunately witnessed the development of such a type of language, based on ethnic, nationalistic, political or religious populist claims destined to combat the apparently most revolting, but often superficial symptoms of the injustices suffered. The masses deeply scarred by a long history of humiliation and structural violence naturally favour the speech of challenge, temporarily emancipative. But this purely reactive language is no different from the one that created it. The language of the "impoverished" promoted by a politicized fundamentalism is one of the most striking examples: after having borrowed and diverted the culturally constituted vocabulary of the genuine poor, it began serving a politico-religious ideology, was transfigured by this manipulation and ended up turning against the poor themselves.

However, where the most discerning of the poor and most attached to the traditions of conviviality sought to invent a language reflecting their own experiences, they have turned this into a refined instrument for the pursuit of alternative lifestyles corresponding to their own

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<sup>35</sup> International Monetary Fund, "2001 Annual Report", website: [http / www.imf.org](http://www.imf.org).

<sup>36</sup> J. Stiglitz, "Globalization and Its Discontents", Paris, Fayard, 2002, p. 114.

aspirations, taking into account both their traditions of simplicity and hospitality and the requirements of modern society where everything is constantly to be re-thought.

## 2. THE MODERNIZED POVERTY

The concept of modernized poverty is the work of Professor Majid Rahnema, diplomat and former Minister of Science in Iran. This new version of poverty is the result of pressure and frustration conveyed by the economization of human societies. Majid Rahnema believes this modernized poverty threatens all social categories. *"Notwithstanding the fact that the goods and services produced by the modern economy are enough today to meet the necessities which all people worldwide need for their well-being, the vast majority of these people lives in poverty or is threatened by it. This anomaly is coupled with a perfectly paradoxical discourse: societies that promote the principles of sovereignty and freedom of the individual, equality for all, reduce in fact, the human being to a mere market value, increase inequality and reinforce the undemocratic structures and thus, create new hierarchies even more difficult to combat."*

For liberal ideologies, the period of structural adjustment was a great contribution to the underdeveloped societies. Insofar as it gave them time to adapt to new market rules and allowed the poor to enjoy the benefits of growth "trickle-down effect". However, these same strategies that claim to be able to raise their standard of living, often simply rather increase slightly the needs of the poor and the hope to meet them, and in the long run, forge more dependence to the system. The same social outcasts are weakened by another syndrome namely; loss of self-confidence. The logic of the market is to disqualify the labour of the poor and reduce them to mere "recalculated". At the same time, the requirement of the progress it represents creates barriers to alternatives that may enable the excluded to be self-employed. The poor condemned to inactivity is thus forced to face the facts *"Since there is no use for their capabilities in a system of capital money valorisation, they are rejected, excluded, deemed inexistent"*<sup>37</sup>.

Modernized poverty is magnified by the isolation that it condemns its victim to. The loss of their relationships and friends capital following the loss of their job leads the poor to shun others. Historically, he who works is never considered poor. The label: *vagabond* was the label of he who did not want to work. Today, with the advent of modernized poverty, hundreds of millions of women and men who are willing and able to work are classified as poor if their skills do not match a specific profile and are not valued in the market of employment. Market fundamentalism wanted this mismatch between system requirements and skills of people to increase with every technological progress, especially in the so-called developing countries. In these countries, the production system pushes the poor farmer to invest in mass production or what is commonly known as "agribusiness" to ensure currency influx, a sine qua non condition for the modernization of a country. The same farmer who was always solvent to his community and habits is now, consequently, forced to accept what is decreed. The day when the market decides to do without him, pretending he is no longer qualified, all the skills, which, for centuries, had made people like him socially recognized and respected, will be of no more value to the community. Globalization that Serge Latouche describes as blind provides a good example of a technology; like IT, whose progress widens the gap between children with a highly developed know-how and others structurally disqualified.

In human societies, the poor lived in the strictly existential fear of becoming one day a stranger. He was mainly afraid of being in a situation of isolation. Yet, it is precisely this fear that is the daily routine of the modernized poor who begins to have a strange perception of themselves. The poor suffers, according to Emmanuel Mounier, this *"only real misfortune which is to suffer*

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<sup>37</sup> Gorz A., *Misère du présent, richesse du possible*, Paris, Galilée, 1997, p. 18.

*separately, deprived of cruel fraternity and unfortunate intimacy."*<sup>38</sup> And even if they have access to new services and have far more assets than the poor in vernacular societies, they are more than ever doomed to marginalization. The ancient writings tell us that in human societies, the individual could live in dignity while being devoid of any kind of materiality. Working, even for a meagre salary, was an honour for the individual. It was a way to establish oneself within the community. Proving their social utility by work, the person knew in advance that they would always be reliable in case of need. Unlike the old times, and instead of developing human labour, the new economy tends rather to underestimate the labour of the poor and to relegate it to the nth rank on the scale of profitability. In the eyes of the System these poor workers become interesting only when their addiction to the invented needs is profitable. For market fundamentalists all means are good to make these same people, despised at first by the system, loyal consumers to the capitalist mode of production. Thus, among the needs of a family, which is reduced to the simple condition of survival in the suburbs of Casablanca, there is now: the satellite dish, the Barbie doll, tablets, mobile phones, Coca-Cola packs, the enrolment of children in private schools, etc., even if over-indebtedness ensues, and all this so that their children may have a lean chance of success. While instilling this lifestyle, the system has condemned the family to enter into a dead end, and where it is almost impossible to reconcile the never ever sufficient resources and the never ever satisfied needs.

The remarkable breakthroughs in technology and marketing are far from fixing matters. The production system is no longer content with transforming simple desires into real needs; it plays on the management of differences in order to deprive the consumers of their uniqueness. The market Evangelists often refer to state-of-the-art discoveries in human-science, anthropology, sociology, psychology and economy- to probe the secrets behind the creation of desires and their satisfaction. The behaviour of the subject concerned is observed meticulously in order to better identify the needs. The uniqueness of their needs is brutally broken down and disfigured. For this reason, appropriate tools are implemented: the sales, promotions, advertising, etc. The picture depicts consumers who believe that, by accumulating purchases, they are actually exercising their freedom while their choices are in fact dictated by what Jean Baudrillard calls "*the constraints governing differentiation and obedience to a code.*"<sup>39</sup>

There is no doubt that globalization has become a gigantic exclusion machine. Despite the crises, the economies show a great ability to reproduce, which is unfortunately not the case for individuals. The surge of populist parties in Europe is the proof. When assistance policies have shown their limitations, where reality portends a bleak future for the poorest, where market fundamentalism takes over the middle classes making them more vulnerable, we need to rethink strategies to combat poverty. Having demonstrated their limitations, public development aids should be more respectful of the socio-bio-diversity and of contexts because "*a poorly devised aid produces automatically to-be-assisted people.*"

## LITERATURE

1. AUSTRUY J., « *Le Prince et le Patron* », Paris, Cujas, 1972.
2. GEERTZ C. et ROSEN L., « Suq, The Bazaar Economy in Sefrou » in *Meaning and order in Moroccan Society*, Combridge University Press, New York, 1979.
3. GISLAIN J., STEINER P., « *Economic Sociology: 1890-1920* », Paris, PUF, 1995.
4. GRANOVETTER M., « *Getting A Job: A Study of Contacts and Careers* », Paris, Desclée de Brouwer, 2000.

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<sup>38</sup> Rahnema M., « *Quand la misère chasse la pauvreté* », Paris, 2003, p. 221.

<sup>39</sup> Baudrillard J., *The Consumer Society: Myths and Structures*, Paris, Denoël, 1970, p. 80.

5. KHERDJEMIL B., PANHUYS H., ZAOUAL H., « *Territoires et dynamiques économique : Au delà de la pensée unique* », Paris, L'Harmattan, 1998.
6. LATOUCHE S., « *The Other Africa: between gift and market* », Paris, Bibliothèque Albin Michel Economie, 1998.
7. UNDP, "2009 World Report on Human Development", Paris, Economica, 2010.
8. RAHNEMA M., « La pauvreté globale: Une invention qui s'en prend aux pauvres », in *Cahiers Interculturels*, Volume XXIV, N°.2, 1991.
9. RAHNEMA M., « *Quand la misère chasse la pauvreté* », Paris, Fayard, 2002
10. SABELLI F. & GEORGE S., « *Faith And Credit: The World Bank's Secular Empire* », Paris, La Découverte, 1994.
11. SABELLI F., RIST G., PERROT M-D., « *Programmed Mythology - Economics Of Belief Systems In Modern Society* », Paris, PUF, 1992.
12. SEN A., "Rethinking inequality" », Paris, Seuil, 2000.
13. STONEMAN C., « *The World Bank and the IMF in Zimbabwe* » in Bonnie K. Campbell & John Loxley (dir), *Structural Adjustment in Africa*, Saint Martin's Press, New York, 1989, p; 37-66.
14. VERHELST T., « *Economic organisations and local cultures: explorations into the cultural embeddedness of local economic life* », website : [www.google.fr](http://www.google.fr)
15. ZAOUAL H., « La pensée économique peut-elle être flexible », in Granier R. & Robert M (dir), *Culture et structures économiques. Vers une économie de la diversité ?*, Paris, Economica, 2002.

## THE IMPACT OF PERCEIVED ORGANIZATIONAL PRESTIGE ON ORGANIZATIONAL IDENTIFICATION

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### ABSTRACT

*The aim of study is to analyze the impacts of perceptions of employees' organizational prestige on organizational identification. Data sampling of the study is 450 employees of one national and international furniture manufacturing industry firm based in Kayseri, Turkey. The findings of research indicated that perceived organizational prestige has a positive impact on organizational identification. Besides the results, practical implications are discussed, and suggestions for the future research are carried out.*

**Keywords:** *Organizational prestige, organizational identification, furniture industry*

### 1. INTRODUCTION

The competition among organizations intensifies in accordance with rapid changes on technological, socio-cultural, environmental aspects of global economy. In this competitive environment, businesses should take into consideration the human factor so that they are able to maintain their existence. In this respect, employees' identification with the organization begin to become influential. Identification refers to emotional bonds between an individual or a group and based on shared similar perceptions and processes within the organization. Employees who high level of identification with the organization act in line with the norms and values of their group even if no compulsiveness, no employee agreement or no control mechanism exists (Gautam vd., 2004: 306). Organizational identification requires cognitive skills that employees express themselves through qualifications or aims and that qualifications or aims exist in perceived organizational identity. In general, organizational identification comprises of cognitive, affective and behavioral elements. The more employees identify themselves with the organization, the stronger they show cognitive, affective and behavioral properties (Tüzün ve Çağlar, 2008: 1015-1016).

**Organizational identification** is the process that organizational and individual goals become increasingly integrated and congruent (Ashforth and Mael, 1989: 23). In other words, organizational identification is employees' psychological commitment to the organization. This psychological commitment means that employees see organizational characteristic as their own personal characteristic (Turunç and Çelik, 2010: 187). Many factors lead to employees' identification with the organization. This study is limited to employees' perception of organizational prestige. **Organizational prestige** is defined as employees' assessment about the

organization they work for and what others think of their organization (Ciftcioglu, 2010: 86-87). Organizational prestige reflects the activities of the group being active in the society and shows the visibility of the organization (Andrew et al., 2006: 165).

In the literature, some research exhibit positive relationship between perceived organizational prestige and organizational identification (Carmeli, Gilat and Weisberg, 2005; Tak ve Çiftçi, 2009; Podnar, 2011). In the light of these studies, it has been planned to test the following hypotes:

**H1:** Perceived organizational prestige has positive impact on organizational identification.

## 2. RESEARCH METHODOLOGY

### Measures

Organizational identification was designated as the dependent variable in this study, while perceived organizational prestige was considered as the independent variables. To measure perceived organizational prestige we used the 8 items Questionnaire developed by Mael and Ashforth (1992). Participants responded on a 5-point Likert-type scale dictating to the extent which they agreed with each statement (1= strongly disagree, 5= strongly agree). The Cronbach's alpha coefficient was 0,811.

On the other hand, organizational identification was measured with six items 5-point Likert scale (1=strongly decrease, 5=strongly agree) developed by Mael and Ashforth (1992). The Cronbach's alpha coefficient was 0.844.

### Sample

Data sampling of the study is gathered from 450 employees of one national and international furniture manufacturing industry firm based in Kayseri, Turkey. The sample consisted of 6.3 percent of females and 93.7 percent of males. 87.3 percent of the respondents were married and 12.7 percent were single. Out of employees in the research 5.4% ranges 25 years and less, 64.4% 26-35 years, 27.3% 36-45 years, 2.7% 46-55 years, 0.2% 56 years and more. In terms of educational levels, 26.4% of the respondents had graduated from primary school, 53.2% from high school, 10.1% from Vocational School, 9.2% from the faculty and 1.1% from Ph.D. Considering work experience of employees, 2.7% of them work less than 1 year, 10,1% between 1-3 years, 24.0% 4-6 years, 23.8% 7-9 years, and 39.5% 10 and more years.

## 3. RESEARCH FINDINGS

The regression analysis was carried out to determine the efficacy level of perceived organizational prestige on organizational identification.

*Table 1: The results of regression analysis for Organizational Identification.*

Independent variable	$\beta$	S.E.	t-value	Sig.	Tolerans	VIF
<b>Perceived Organizational Prestige</b>	0,475	0,047	11,415	<b>0,000*</b>	1,000	1,000
F			130,310			
Adjusted R <sup>2</sup>			0,224			
R <sup>2</sup>			0,226			
Std. Error of the Estimate			0,76358			
Durbin-Watson			1,780			
Significance level			<b>0,000*</b>			

Dependent variable: **Organizational Identification**

\* p<0,01



The results of regression analysis in Table 1 suggest that the overall model was significant (Adjusted  $R^2 = 0,224$ ;  $F = 130,310$ ;  $p < 0,01$ ). The independent variable (perceived organizational prestige) was taken into account, and the Adjusted  $R^2$  (0,224) was significant at the 0,01 level. This means that 22,4% of the variance in organizational identification was significantly explained by the independent variable (perceived organizational prestige). In this frame, the findings of research reveal that perceived organizational prestige has positive and significant impact ( $\beta = 0,475$ ;  $p < 0,01$ ) on organizational identification. This result is consistent with the results of Carmeli, Gilat and Weisberg (2005), Tak ve Çiftçi (2009) and Podnar (2011). In this respect, H1 was supported. Therefore the more perceived organizational prestige increases, the more organizational identification increases.

#### 4. CONCLUSION

The findings of this study need to be interpreted with the following limitations in mind. First limitation is that the results can not be strictly construed to be representative of all employees in furniture manufacturing industry firms around the world, because this study has been conducted in Kayseri, Turkey. Therefore, the study needs to be replicated in different industries and countries in order to generalize the findings. Second, participants may have been biased to present positive aspects of their businesses.

#### LITERATURE

1. Andrew, D.P.S., Todd, S.Y., Greenwell, T.C., et al. (2006). "Perceived Organizational Prestige and Collegiate Athletic Department Employees", **Journal of Contemporary Athletics**, Vol: 2, No: 2, pp. 163-174.
2. Ashforth, Blake E. and Fred Mael (1989). "Social Identity Theory and the Organization", **Academy of Management Review**, Vol: 14, No: 1, pp. 20-39.
3. Carmeli, Abraham; Gilat, Gershon and Weisberg, Jacob (2005). "Perceived External Prestige, Organizational Identification and Affective Commitment: A Stakeholder Approach", **Corporate Reputation Review**, 9(2): 92-104.
4. Ciftcioglu, A. (2010). "Exploring the Role of Perceived External Prestige in Employee's Emotional Appeal: Evidence From a Textile Firm", **Business and Economics Research Journal**, Vol: 1, No: 4, pp. 85-96.
5. Gautam, Thanewor, Rolf Van Dick and Ulrich Wagner (2004). "Organizational Identification and Organizational Commitment: Distinct Aspects of Two Related Concepts", **Asian Journal of Social Psychology**, Vol: 7, No: 3, pp. 301-315.
6. Mael, Fred and Blake E. Ashforth (1992). "Alumni and Their Alma Mater: A Partial Test of the Reformulated Model of Organizational Identification", **Journal of Organizational Behavior**, Vol: 13, No: 2, pp. 103-123.
7. Podnar, Klement (2011). "Perceived External Prestige, Organizational Identification and Organizational Commitment: An Empirical Examination", **Teorija in Praksa let.** 48(6): 1611-1627.
8. Tak, Bilçin and Çiftçiöğlü, Aydem (2009). "Algılanan Örgütsel Prestij ile Örgütsel Bağlılık ve Örgütsel Özdeşleşme Arasındaki İlişkilerin İncelenmesine Yönelik Bir Araştırma", **Akdeniz İ.İ.B.F. Dergisi**, 18: 100-116.
9. Turunç, Ömer and Mazlum Çelik (2010). "Çalışanların Algıladıkları Örgütsel Destek ve İş Stresinin Örgütsel Özdeşleşme ve İş Performansına Etkisi", **Yönetim ve Ekonomi**, Cilt: 17, Sayı: 2, ss. 183-206.
10. Tüzün, İpek Kalemci and İrfan Çağlar (2008). "Örgütsel Özdeşleşme Kavramı ve İletişim Etkinliği İlişkisi", **Journal of Yaşar University**, Cilt: 3, Sayı: 9, ss. 1011-1027.

## GOVERNANCE AND ECONOMIC GROWTH - THE ALGERIAN CASE

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### **ABSTRACT**

*The passage of Algeria from annuity and administered economy to an economy of market, its insertion in the free trade area with the European Union, and its membership to the World Trade Organization (WTO), commit the country in a new phase of profound transfers which touch the organization, the structures and the modes of management which, for a long time, characterized the governance of the Algerian companies. Indeed, the opening of the Algerian economy requires an acceleration of priority reforms intended to encourage the private investments, to diversify its economy to make it less dependent on hydrocarbons, and to create jobs.*

*Compared to the figures of the 1990s, the growth of the Algerian economy has known significant increase since 2000. This improvement of the economic situation contains however some reserves. First of all, it does not concern all sectors; moreover, the external factors including the increase of oil prices and the manna which resulted have contributed strongly to this growth. To generalize this growth to all sectors and reduce its volatility according to the oil sector, international organizations (World Bank and IMF) recommend to improve the governance.*

*To do this, the public authorities have adopted international standards, and have undertaken structural reforms to create an environment and an effective regulatory framework, in order to promote economic growth and durable development. It is the membership of Algeria to the principles of good governance.*

*However, Algeria remains unattractive in foreign investment despite the importance of resources available. Also, the non-hydrocarbon sector displays very low growth rate.*

*Our communication attempts to analyze the relationship between the state of the governance and economic growth in Algeria.*

**Keywords :** Governance, Growth, Investment, market

### **1. INTRODUCTION**

Not only the best endowed countries in physical and human capital, and technology are the countries that live a sustained growth. Many countries are rich in resources but sometimes record negative growth rates, meaning that structural constraints as: political instability, corruption, poor regulation of economic activity, non-compliance with principles of law rules and the inefficiency of government don't allow some states to bring economic growth to the optimum level.

The passage of Algeria from annuity and administered economy to an economy of market and productivity to succeed its integration in the global economy, its insertion in the free trade area with the European Union, and its accession to the World Trade Organization (WTO), commit the country into a new phase of profound transfers which affect the organization, structures and the modes of management which, for a long time characterized the governance of Algerian

companies. Indeed, the opening of the Algerian economy requires an acceleration of priority reforms intended to encourage the private investments, to diversify its economy to make it less dependent on hydrocarbons, and to create jobs.

Compared to the figures of the 1990s, the growth of the Algerian economy had known significant increase since 2000. This improvement of the economic situation contains however some reserves. First of all, it does not concern all sectors; moreover, the external factors including the increase of oil prices and manna which resulted have contributed strongly to this growth. To generalize this growth to all sectors and reduce its volatility according to the oil sector, international organizations (World Bank and IMF) recommend to improve the governance.

To do this, the public authorities have adopted international standards, and have undertaken structural reforms to create an environment and an effective regulatory framework, in order to promote economic growth and durable development. It is the membership of Algeria to the principles of good governance.

However, Algeria remains unattractive in foreign investment despite the importance of resources. Also, the non-hydrocarbons sector displays very low growth rates.

Our communication attempts to analyze the relationship between the state of the governance and economic growth in Algeria. In other words, the objective of this work is to demonstrate the importance of governance on economic growth in Algeria. Since the 1990s, the relationship between governance and economic growth is gaining interest within the scientific community.

Today, the scarcity of funding sources and the need for economies of competitiveness requires improving the quality of governance. Several theoretical and empirical researches have been done to show the relationship between the quality of governance and economic growth. Among these works, we will cite those realized by the World Bank, particularly by Kaufman (1996) and Mauro (1995).

These works have examined how the political, economic and institutional governance can explain the success or failure of growth policies.

This work focuses on the relationship between governance and economic growth. In other words, it addresses the issue of the contribution of governance in economic growth.

From this, our working hypothesis is as follows: Improvement in the quality of governance leads to increase economic growth.

This work is structured two essential points which the first addresses a literature review. Governance and its relationship with economic growth in Algeria is the second item.

## **2. GOVERNANCE AND ECONOMIC GROWTH**

For the World Bank, governance appeals to public management concepts, of accounting, legal, free information and transparency; which reflect the choice of maintaining a certain political dimension into the new development model (Biagiotti 1997). For this institution, governance is "the way that power is exercised in the management of social and economic resources of a country, to ensure a strong and equitable development, and necessary complement to healthy economic policies". The Bretton Woods institutions underline that good governance is one of the necessary conditions for the growth and sustained development (Frischtak, 1994). In this regard, they claim, "Good governance is good economics". This is without probably why the notion of governance is central to the new development model recommended by the Bretton Woods institutions, in the 1990s, faced with the proven inability of adjustment policies to promote growth.

This notion has broadened to democratic considerations, so that the "good" governance is looked today as a synthesis of technocratic governance (better management of budgetary

resources to revive the reforms of the public function and the State apparatus) and Democratic Governance (legitimacy of the government and its openness to civil society, so that political leaders responsive to the needs and expectations of populations, democracy supporting the socio-economic development).

On the theoretical level, the literature on the relationship between governance and economic growth will thought of the current theoretical and empirical scientific analysis which condensed here highlights the relationship between governance on the one hand and economic growth on the other hand.

**1- Major currents of thought on the role of institutions and governance** as part of the relationship determination between economic growth and governance, several authors have developed thoughts. Among the most representative, we can mention five:

(1) Rent-seeking theory that stems from public choice theory. It stipulates that economic agents have a basic motivation which is the rent seeking. Agents try to get the highest income in the absence of economic and social rules conduct.

(2) The second theory is that of the capture or positive regulatory economy. This theory developed by Stigler (1971) describes how interest groups and political actors use regulatory means and the coercive power of the state to guide the laws and rules in directions that favor.

(3) A third theory, which addresses governance issues in relation to development, is the theory of normative public economics. This economic thinking says that we can expand the role of the state to correct imperfections and market failures identified.

(4) The fourth theory is on the bureaucratic waste theory developed by Niskanen (1971). For the author, the bureaucratic structure that prevails in the public sector causes unnecessary swelling public spending, because government programs are too great, or because the productive combinations used are not optimal. This theory can predict a relationship between the quality of services provided by public administration and growth expected to lead optimum productive combinations.

(5) The fifth theory is relative to the new public economy. This thought analysis state failures as legislator and proposes to correct them, because the market is not the only source of shortcomings.

### **3. SOME RESULTS**

The relationship between economic growth and governance was made by several authors starting with Toke et al. (2007), studying the relationship between corruption and economic growth and believes that corruption is a reflection of the quality of institutions. For these authors, maintaining a new sustainable economic growth in the medium and long term requires a qualitative change of governance structures and institutions, as well as the behavior of actors. Thus, Mauro (1995, 1998), who worked on a large sample of countries, concludes that corruption has little effect on the long-term economic growth, but a strong and negative impact on investments. He joins Gyimah-Brempong (2002), whose work focused on a data panel of African countries and which led to the evidence that corruption is reducing economic growth, especially since it reduced the physical capital inject into the economy. In the same vein, Mo (2001), showed that corruption negatively affects the growth by political instability and a 1% increase from the reduced level of corruption 0.72% the rate of economic growth.

The work of Da Silva et al. (2002) on influences of corruption on economic growth concludes that corruption is a "plague" for the economies of developing countries. For them, corruption is characterized by the low level of the institutions development that should protect the rights of privates. Thus, it follows that the low level of struggle against corruption institutions increases the latter and impinges on the factors of production, namely capital.

Kaufmann and Kraay (2002, 2003) explored the interrelationship growth-governance through several indicators. They conclude that a good governance leads to a rise in the per capita income and the opposite phenomenon is observed when the level of governance is weak, followed by a stagnation of the economy because of negative growth rates.

North (1990), has chosen democracy, political stability and corruption to analyze causality between governance and economic growth. For this author and others as Hall and Jones (1999); Rodrick et al (2002); Ouidade (2010), if any increasing of capital and labor amounts has positive impact on growth, the increase will be much greater if the economy has seen a good quality of governance. Thing, which will make more efficient mobilization factors over time and induce growth.

In this sense, Fosu (1992) and De-Haan and Siemann (1996) show that the effect of political instability requires investment and capital accumulation, to negatively affect economic performance. Guillaumont and Brun (1999) share the same conclusion but challenge these effects in the case of African countries and they show that the effect of political instability defined as a combination of coups and civil wars is rather live on the residue of growth and has no bias for the accumulation and investment.

For their part, Maria-Angels and al (2002) studied the relationship between political intuitions, foreign direct investment and the development in 119 developing countries. They lead to the conclusion that democracy has a positive and significant effect on economic growth in these countries, as a good democracy encourages foreign direct investment, which are inputs for economic growth of a country. Thus, they recommend that governments should strive to develop and ensure the rule of law and transparency in support of this assertion, Henri (2013), recognizes that political stability and the regulation of economic activity influence positively in economic growth in Africa. Because of these findings, the fight against corruption can trigger economic growth in countries rich in natural resources and applying democratic principles. But, other governance indicators in this case the control of corruption and respect for the principles of the rule of law, do not produce the expected effects in poor countries with natural resources which are mainly of less advanced countries (LAC).

Moreover, the literature on the link between governance and economic growth is very rich, but it did not address at what point the various indicators of governance can boost the economic development of a nation. This article attempts to do this through the examination threshold effects of governance in relation to economic growth.

#### **4. GOVERNANCE AND GROWTH IN ALGERIA**

From a social perspective, it is widely accepted, including by international institutions, that the structural adjustment policies had disastrous results. Indeed, they have generated more poverty in the countries that were the subject. Thing, which drives the international institutions to put the issue of poverty in the agenda of priorities. From here, structural adjustment policies even though they have contributed to the stabilization of the macroeconomic situations of some countries, remains that they have weakened the social conditions of individuals. Under these conditions, Stiglitz (2002) writes: "The IMF therefore underestimated the risks of its development strategies for poor. However, he also underestimated the political and social costs long-term measures that have devastated the middle class to enrich tiny elite, and overestimated the benefits of its neoliberal measures". Given this, Stiglitz (2002) writes: " Any successful development carefully ensures the maintenance of social stability".

All told, economy of development took a major turn in the late 80s. From here, the failure of structural adjustment policies, is interpreted by the World Bank as a lack of institutional capacity in some countries, it therefore directs its programs to what it called "the good governance". Therefore, the policy made a remarkable entry into the discourse of international

institutions. Therefore, it is not only to focus on the programs set up; it is also about understanding the nature of institutions that embody these programs. Thus, "the good governance" can refer a priori to the consideration of political behavior in development (Hidouci, 2003). That is to say, the political cost is highlighted in the new theories of development.

In this context, the governance of the company has not the same importance in the developing world. (Including emerging markets and economies in transition), where national economies tend to be dominated by large companies, held by families, state and / or foreign companies, whose shares are hardly traded on local stock markets, and where a host of small business often provides a significant share of employment and production.

For a long time economic development was equated with physical capital accumulation (investment). To catch up with the rich countries, poor countries must devote a significant proportion of their national income in favor of the investment. Thus, for some countries the share of investment in national income reached over 40%. As part of this lot, Algeria, which was overcome underdevelopment in the 80, discovered his enlistment in a crisis that affects the whole of social life (negative economic growth, foreign debt, unemployment, inflation). The worsening economic and financial situation of Algeria in 1994 led the authorities to implement a reform program supported by the IMF and the World Bank, and to start negotiations for the rescheduling of external debt.

The process of transition from a centralized economy to a market economy has imposed since the early 90s, a structural reform policy that made possible the restoration of macroeconomic stability and liberalizing the economy. These reforms have improved some performances in terms of growth of gross domestic product (GDP) and the development of a private sector, consequently causing a greater inflow of foreign direct investments (FDI). However, the results remain modest compared to the country's investment potential (UNCTAD, 2004). Although Algeria has achieved positive results in some sectors, such as hydrocarbons, telecommunications, pharmaceuticals, steel and chemicals, the reforms introduced over the last 10 years have been insufficient to enable the country to benefit significantly from positive externalities of FDI (job creation, technology transfer and expertise, access to international markets, etc.). Moreover, a slowdown in the implementation of structural reforms is noticeable, especially regarding (UNCTAD, 2004) the privatization program, reforming the banking and financial sector, tax reform, promotion of good governance of business and the implementation of regulations on competition. Now all these reforms are necessary to improve the national framework of investment and thus enhance growth.

If the PME PMI sector now accounts for a significant share of GDP excluding oil and gas sector, it consists mainly of small businesses, the majority exercises in the field of construction, import-export and services. This is for most companies in their own name or LLC whose capital belongs to members of the same family. The opening of the capital to outside investors or employees is still relatively rare. The bulk of the investment is equity, which limits the development capacities of production structures.

The number of PMEs in Algeria is estimated at 700 000 businesses, a figure lower than its Maghreb neighbors. The new businesses are still insufficient, with 70 companies created each year to 100,000 inhabitants. Yet experts (ANIMA) agree that it is the PME sector that will allow Algeria to modernize and diversify its economy highly dependent on oil today (98% of exports). The generalization of free trade, encouraged by the European Union in its Association Agreement, and the World Trade Organization including Algeria wishes to become a member, poses new challenges. Upgrading PME seems necessary not only to adapt to the international context but also to enhance the country's competitiveness. Faced with competition, Algerian PMEs, often family, are forced to invest or to collaborate with large companies. However, the

reluctance to open their capital, and the difficulties encountered in finding funding sources still constitute real obstacles (ANIMA). To these constraints, must be added the institutional framework, which gradually adapts to the requirements of a market economy. However, it is still far from functioning smoothly because of the shortage of qualified commercial judges and lack of understanding by the business community of best practices in other market economies (Ex., Legislation guarantees, bankruptcy, alternative dispute resolution). There is also a limited confidence to the business community in the impartiality of the judiciary. Despite significant progress, the judicial system remains characterized by problems that could force the business climate in Algeria. The procedures are slow, costly and uncertain. Shortcomings regarding the technical quality of judicial decisions, or their advertising or the very small role of case law on the unification of the law raises the recurring problem of the training of magistrates. In certain circumstances, the judicial system appears to face difficulties in making certain decisions enforceable, which has the effect of discouraging judicial remedy against administrative acts. As shown in the table below, the procedures to resolve a contractual dispute are penalizing in Algeria, either in number of procedures or number of days needed for. (See Table N°1).

**Table 1:** Business Climate: Algeria's grade

Rankings by Category	2015 Ranking	2010 Ranking	Variation in ranking
Business creation	143	148	+5
Granting of building permits	124	110	-14
Employing Workers		122	--
Transfer of ownership	160	160	No changes
Getting Credits	171	135	-36
Investors protection	173	73	-100
Paying Taxes	168	168	No changes
border trade	176	122	-54
Contracts execution	106	123	+17
Insolvency Regulations	71	51	-20
Source : Doing Business, World Bank 2015			

Improvements are recorded added to the business climate in Algeria and helped increase the share of private sector in the economy; However, much remains to be done to alleviate the constraints on economic activity, particularly in the non-hydrocarbon sector, and fully unlock private initiatives. The quality of governance is relatively weak. To this situation, are added the delays in the implementation of structural reforms to raise the main constraints to private sector development, which are identified below and have frustrated investors for years. The slow progress is due to the resistance to change, which feeds in multiple causes, from the fear of losing the benefits gained for purely ideological considerations, and remains a major obstacle to reforms. High oil prices since 2000 have also contributed to postponing the difficult decisions.

The main constraints to the development of a business climate can be summarized as follows:

- A public sector which still controls a large part of economic activity
  - A sizeable informal sector
  - Difficult access to industrial land
  - Financing Difficulties.

- Strong administrative barriers.
- Limited access to information.
- A shortage of labor regulations and lack of skilled workers.
- Inadequate infrastructure.
- A legal and judicial system little effective.

The characteristics of the Algerian system of governance have both evolved and kept some features dating from the socialist period, notes the latest report "Country profile: Algeria" recently published by the Euro-Mediterranean network of independent economic institutes for economic analysis of the Barcelona Process (FEMISE).

An decision process overly centralized, a parliament unwilling to challenge that offers it the executive and ill-equipped to offer credible alternatives, preparation of large sometimes approximate economic issues, a chronically failing of public information system coupled with retention of economic social and politic information, on the part of the administration, freedom of expression often hampered, weak and divided political parties, All that prevents see realized the criteria of real governance. "Many citizens feel that the state is confiscated by a minority that monopolizes everything about public affairs to enjoy the benefits of holding power," the report states that the decision process is characterized by centralization and low transparency - if it is quite opaque in some areas. The document notes "embezzlement and corruption are real evils which are seriously affecting the country." the report refers to "pressures on judges from either the authorities who interfere in the administration of justice, or private individuals who do not hesitate to use corruption." The authorities, note the text, recognize the existence of corruption which affects more services than those of justice whose extend steel difficult to define.

## 5. CONCLUSION

The governance in recent years has generated several studies whose results are all converging and contradictory. These studies have shown a significant relationship between governance and economic growth. This influence of governance on growth is positive according to some authors, negative under certain conditions to other authors. This influence is as sensitive as the level of wealth of the country. Given these conflicting results, several questions on the real relationship between governance indicators and economic growth. The present article has therefore set a goal to answer these questions.

A methodology based on six indicators (citizen voice, political stability and absence of violence, government effectiveness and regulatory quality and rule of law and control of corruption), is a palette, from good governance to bad governance where over 200 countries are ranked based on these indicators, although if the case Algeria is not analyzed in this methodology. A comment also from this study is that the more governance is good and getting better it affects economic growth and not the reverse, without necessarily causal relationships. Stating that for the World Bank, Algeria advance in improving its governance under the raised indicators.

Also, the reforms undertaken in the 1980s and 1990s (liberalization of foreign trade, price policy, banking reforms, business law reform, of anonymous company, competition law, labor code) destined to encourage a favorable environment for economic growth. Driven under pressure from international organizations and the Euromed dynamics, these reforms have also updated the strength of the company towards institutional changes. For example, the creation of a Competition Council allowing the economy to function more transparently, is seen as an institutional weapon of agreements sanction between companies.



## LITERATURE

1. CHARREAUX G., (2004). « Les théories de la gouvernance : de la gouvernance des entreprises à la gouvernance des systèmes nationaux ». Université de Bourgogne. 58 p. (Working papers du FARGO, n° 1040101).
2. CNUCED, (2004), « Examen de la politique de l'investissement en Algérie ».
3. Code Algérien de Gouvernance des entreprises, (2010).
4. HIDOUCCI G., (2009), « La bonne gouvernance du Sud- Une nouvelle théologie de non libération? Université des alternatives », in La gouvernance stade suprême du colonialisme?, GRESEA, DGCD.
5. FOSU A. K. (2001), «Political Instability and Economic Growth in Developing Economies: Some Specification Empirics», Economic Letters
6. FRISCHTAK, L.. (1994). "Governance capacity and economic reform in developing countries". World Bank technical paper ; no. WTP 254. Washington, D.C. : The World Bank.
7. KAUFMANN, D., KRAAY, A. & ZOIDO-LOBATÓ,N, P. (1999), «Aggregating Governance Indicators», World Bank Policy Research Working Paper, N° 2195, Washington D.C.
8. MAURO, P. (1995), "Corruption and Growth", Quarterly Journal of Economics, Vol.110, N°3, pp. 681-712.
9. MedStatistiques, (2010), « Toutes les statistiques dont vous avez besoin afin d'investir en Méditerranée », INVEST MED, Etude N° 9 / Mars.
10. OCDE, (2008), « Rapport sur la mise en œuvre de la Charte euro-méditerranéenne pour l'entreprise évaluation de la politique de l'entreprise ».
11. OCDE, (2004), « Principes de gouvernement d'entreprise de l'OCDE ».
12. STIGLITZ J., (2002), « La grande désillusion », traduit de l'anglais par P. Chemla, Fayard, p.146.
13. STIGLER G. (1991), « The Economies of Information », Journal of Political Economy.

## IMPROVEMENT OF COMPETITIVENESS IN CROATIAN ECONOMY THROUGH THE IMPACT OF CERTIFICATION OF QUALITY MANAGEMENT

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### ABSTRACT

*Main reason for introduction of Quality management System (QMS) in the companies is the intent of the company to improve the business processes, and consequently the quality of the product or the service. However the key reason for the introduction of QMS on the other hand, is in the desire to upgrade the reputation and the competitiveness on the market. Possession of the certificate sends a message about seriousness of organization that it can guarantee continuity of the products or service to the costumers.*

*Most research conducted in Croatia and abroad refers to introduction of QMS and not taking into consideration the effectiveness of the certification process. For these reasons, an extensive study to determine the extent to which the companies are satisfied with the effects of certification from several different aspects. The purpose is to determine the extent to which the companies consider the possession of the certificate effects on competitive advantage. The paper shows one part of the research and analysis of collected data.*

*The study was conducted on the sample of 127 companies which have certificate in accordance with ISO 9001 standard for more than two years. The emphasis is on the companies from a metal – processing industry, as an activity that is most frequent in certification procedures in Croatia. Process of implementation, maintenance, improvement and certification of QMS according to ISO 9001 is closely associated to expenditure of resources, and costs. Consequently, it is extremely important to come to the knowledge about the stand of customers about the certification process.*

**Key words:** quality, certification, competitiveness

### 1. INTRODUCTION

The date of adoption of the standard ISO 9001:1987 stands for one of the most important dates in the history of the development of the quality philosophy. All the diversity of approaches and thinking has been finally „captured“ in the structured standard with clearly defined requirements. Latest achievements and approaches to quality were supplemented to the audits that followed and that was an additional impact to worldwide acceptance of this standard as the basic tool in creating efficient Quality Management System in companies.

However, although it began just a few years after the standard has been adopted the certification process of companies, with the aim of an independent and objective confirmation of quality system management; has never received a general consensus. With issuing of the first certificates there was also a dilemma and questions were asked about justification of the certification process itself.

It is considered that the main reason for the introduction of the Quality Management System and the business compliance with ISO 9001 standard is mainly the company's goal to improve business processes, and consequently the quality of the product. On the other hand, motives for the certification processes could be different, grounds may derive from variety of different company's interests. These reasons could be hidden in a wish for upgrading of reputation and competitive market advantage. Furthermore, the implementation, maintenance, improvement and the quality management certification processes according to ISO 9001 standard is closely associated to expenditure of resources and respective costs. For those reasons companies have certain expectations from applying the system and certification process.

Many experts in the field of Quality have accepted certification system according to ISO 9001 as excellent tool for confirmation of quality management system. This is confirmed by a large number of issued certificates in the world (by the end of year 2014 at least 1.138.155 certificates, issued in 180 countries). At the end of 2014, total of 2.807 certificates were issued in Croatia.

ISO 9001 standard stands for great and successful tool in the establishment and improvement of business processes, but it is not a magic wand that can solve all issues, especially short term problems. Without consistent appliance of all standard requirements and without continuous upgrading, certification process could appear pointless. Likewise, certificate itself is not an entrance ticket for World or European market. Certificate is very important in that process but organization must be competent to use it for promotional or other purposes, on ruthless market where only the best can survive.

Although many relevant experts and scientists in the field have positive opinion on influence of certification process on development and market position of the company, in the part of professional and scientific community one question still appears from time to time and that is whether quality management system certification really pays off.

In the study conducted in Croatia, on the sample of 400 companies in the period 2000 – 2004 is visible high level importance of Quality Management System especially in companies that have high export orientation. The results determined are as follow:

- The number and share of certified companies among 400 most successful continuously growing
- The number of companies with high share of export is continuously growing
- The share of certified companies among largest exporters is 23, 6 % higher than among the largest importers.

From the analysis of previous studies conducted in Croatia, there was a need to explore the real effectiveness of the certification of QMS according to ISO 9001 standard and the benefits the companies have made of certification.

## **2. SCOPE AND METHOD OF DATA COLLECTION**

Out of a total of certificates issued in Croatia, one of the most frequent activities in certification of QMS (according to available data) is metal processing industry, so the research is directed toward it. According to data from 2014, the number of certificates in Croatia issued, more than 400 certificates issued to companies with codes 17 and 18 (according to EAC classification) indicating the metal processing industry.

The survey was conducted in the second half of 2012. Surveys were sent to all companies that were recorded as certified. The goal was to collect large sample of data from companies in order to eliminate certain deficiencies which carries the process of interviewing. A total of 127 collected proper surveys used in this study.

The conclusion is that the survey covered about 30 % of all certified companies in this classification in Croatia. The survey was filled exclusively online.

The questionnaire contained six basic groups of questions:

1. General information about the company
2. Data on certification
3. Impact of QMS on the company
4. Evaluation of the certification process
5. Impact of the certification process according to ISO 9001 standard
6. Further development of the management system

This paper presents a small part of the survey results, the one that is mainly focused on the impact of the process of certification of QMS to competitiveness of the Croatian economy.

### 3. RESULTS OF RESEARCH

Among the companies that have been filled in the survey, as expected, at first glance, were represented a small businesses. They use criteria under the laws of the division companies to small, medium and large, takes into consideration only the criterion of the average number of employees.

However, according to official data and economic analysis, the share of large enterprises in Croatia in the total number of enterprises is around 1 %. Consequently, the share of large enterprises in a sample of 11 % may be considered as a large segment, which confirms that large companies more easily make decision about going through certification process.

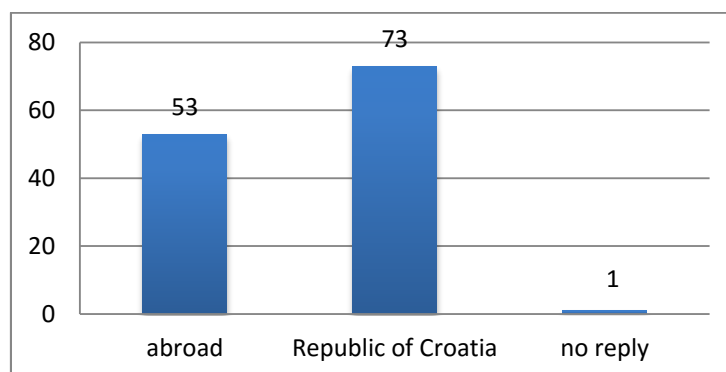
Encouraging is the fact that, according to the survey results, a number of small companies also found it useful to decide on certification of enterprises. The share of 46 % of small business owners is surprisingly large and is larger than the share of medium-sized companies (43 %) due to general sense that small businesses are not prepared to allocate additional resources for certification. Table 1 shows the share of companies - respondents in the sample.

Table 1 the share of companies - respondents in the sample

Classification of the companies	Number of employees	Number of companies respondents
Small enterprises	< 50 employees	59
Medium enterprises	< 250 employees	54
Large enterprises	> 250 employees	14

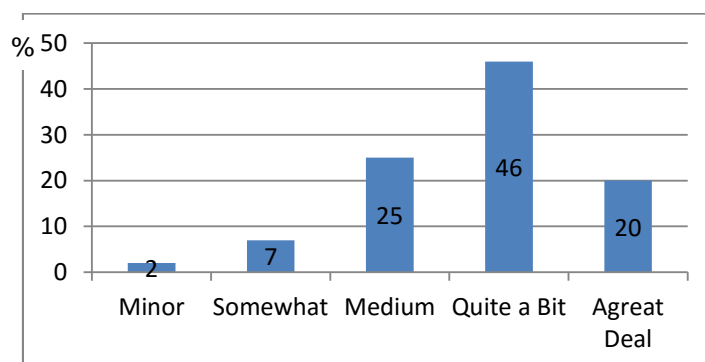
Most of the surveyed companies designated as its main market indicate domestic or Croatian market. There is a view that a large number of companies decide on certification primarily because of the requirements of overseas buyers. These results show that this often is not the main motive for certification and that such requirements exist in the domestic market and the buyer is not the party that always have decisive influence on a decision on the certification, Figure 2.

Figure 1 Share of markets of surveyed companies



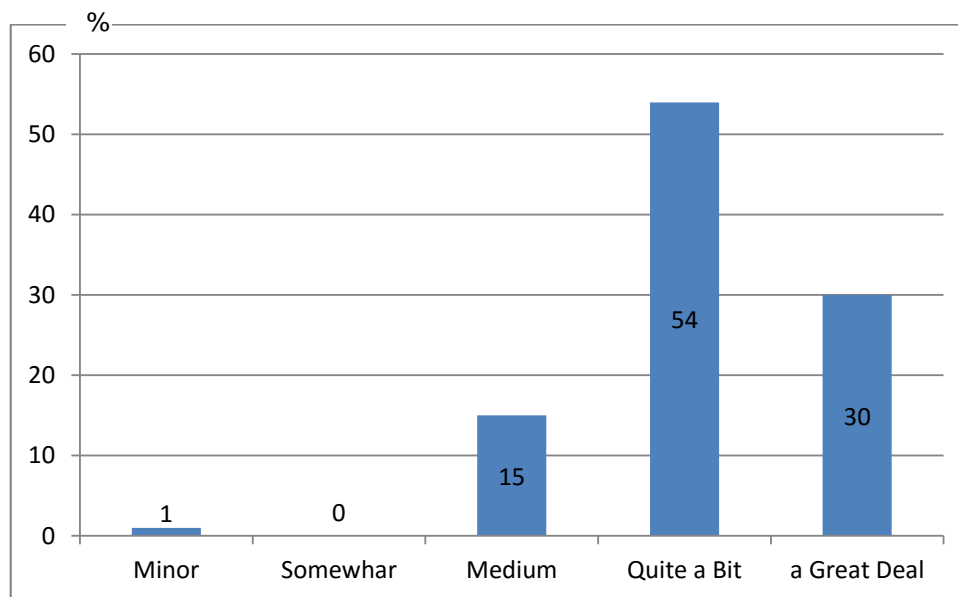
A large number of companies believe that their certification brought a significant increase in competitive advantage. Total 66 % of companies believe that their certification process was a good support in that process and helped a lot or quite a lot, while only 2 % of the companies believe that the certificate has an insignificant impact on the competitive ability, Figure 2. From this we can conclude that in the perception of the enterprises themselves, the certificate has its own weight and reputation in the market and those companies with a certificate can count on a better starting position.

Figure 2 Impact of certification on the competitive ability of companies



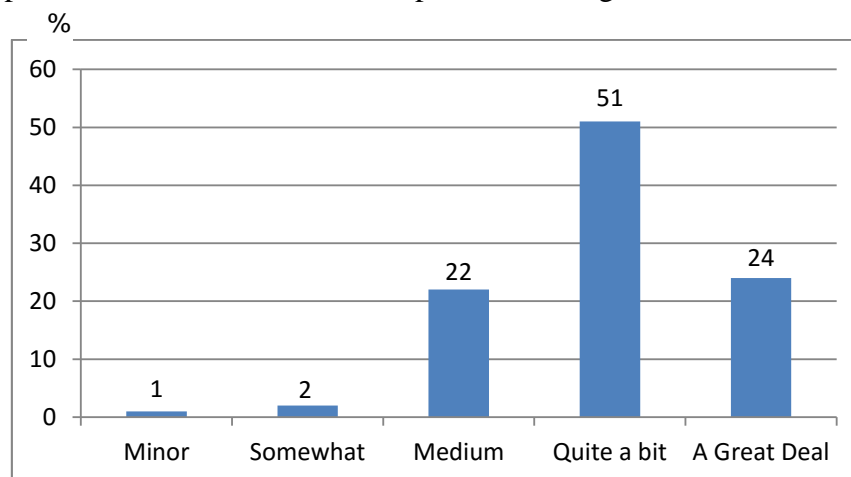
The certificate can certainly be used as a tool to build and strengthen the call public image, Figure 3. A total of 84 % of companies believe that certification of the company improved their public image. This data is very important because it shows the confidence of the company about a positive perception of the certificate according to ISO 9001 in public. Also, the fact that only 1% of companies considered that there was a positive step forward, proving the importance of certification activities as part of the overall activities to build a positive image of the company in public.

Figure 3 Impact of certification on improving the reputation of the company in public



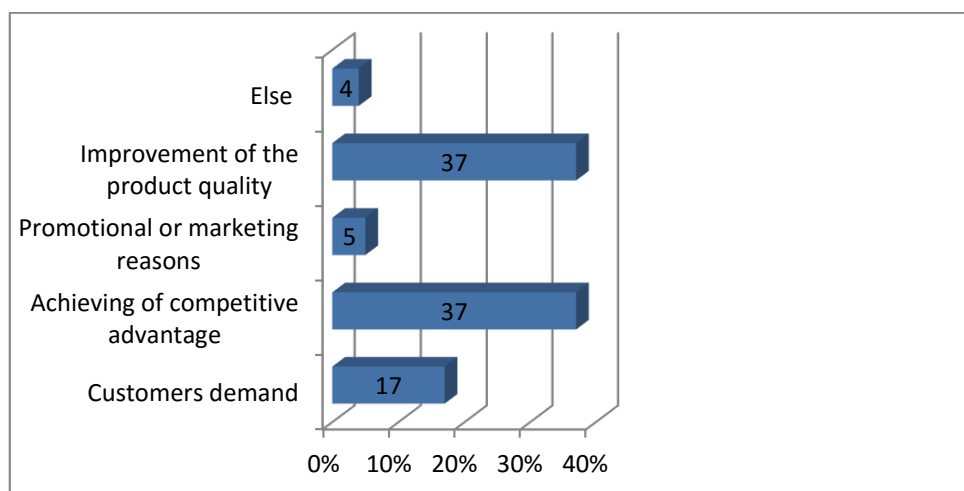
Most companies believe that their certification is a positive impact to their reputation among customers. Of the total surveyed companies, 51 % see a big impact with another 24 % believe that this impact is considered extremely large. Also, it is a small percentage of those who believe that there is no significant impact. It can be argued that the companies believe that their certification in the market has a positive effect on increasing their reputation among customers. The results are shown in Figure 4.

Figure 4 Impact of the certification to the reputation among customers



According to this survey, 37 % of respondents specified that the main reason for the certification is improving the quality of its products, while 59 % of respondents voted for the reasons that we can include in the group of external influences: competitive advantage, direct customer demand or promotional and marketing reasons, in Figure 5. From this it can be concluded that in front of everyone dealing with quality is still a long way to empower awareness of the advantages that a Quality Management System brings to the company what improves its business processes.

Figure 5 Motives of companies for certification of Quality Management System



#### 4. CONCLUSION

Analysis of the results showed that the share of small businesses in the total population is considered as significant. This suggests that the issues of implementation, maintenance, improvement, and in particular the certification must be approached very carefully, taking into account all the specifics and characteristics of small businesses. Knowing these specifics, on the one hand, will significantly facilitate the work of the consultants and auditors who carry out certification audit and increase the overall efficiency and effectiveness of those activities, on the other hand.

From the responses can be seen that the company recognizes the importance of the certification of Quality Management System and that this process significantly contributed to raising the image of the enterprise in business world. This explains the increasing number of customers after certification. Concretization of these claims would require a lot of space and analysis. For this reason the authors did not show in this paper all the analysis, synthesis and other research to confirm the hypotheses.

Increasing the competitiveness is the goal of every company. Achieving such important goals is possible with a good organization of the process, the organization of work, high quality products, including the acceptance of the principles of modern management. A certified Quality Management System according to ISO 9001 certainly provides all the prerequisites for the realization of the set goals and raising the bar to a higher level.

Since the goal of each system is constant improvement, so the Quality Management System must strive for constant and continuous improvement. It is possible to upgrade everything in the system; it is only a matter of priorities and measures. The certification process precisely to its specific way is contributing to the initiation of measures to improve the resolution of non-compliance, and taking preventive and corrective actions. For pulsed and continuous improvement of the system it is possible to build a happy future and find their place in society, business excellence.

At a suitable and convenient manner authors will try to present the results of complete research and to offer concrete solutions to increase the competitiveness of companies in the Croatian economy.

## LITERATURE

1. Alpeza, M.; Eterović, D. i dr.; *Istraživanje o malim i srednjim poduzećima u Hrvatskoj – 2011*, CEPOR, Zagreb, 12/2011
2. Corbett, C. J.: *The financial impact of ISO 9000 Certification in the United States: An empirical analysis*, Management Science, 2008., Vol. 51, Iss. 7, ISSN 0025 – 1909, str. 1046 – 1059
3. Drljača, M., *Kvaliteta sustava upravljanja i poslovna uspješnost u Hrvatskoj*, Zbornik radova 8. Hrvatske konferencije o kvaliteti, Brijuni, 2007
4. Drljača, M.: *Razvoj kvalitete sustava upravljanja u hrvatskom gospodarstvu*, Međunarodni naučno-stručni skup "Quality", Zenica, 2009., str. 121-126.
5. HR The ISO Survey of Certification, <http://www.kvaliteta.net/files/HR%20Survey%202010.pdf>, Osijek, 11/2015
6. Heras, I.; Landin, G.; Casadesus, M.: *The impact of quality management in European companies' performance: The case of Spanish companies*, European Business Review, 2006., Vol. 18, Iss.2, str. 114 – 131
7. International Organization for Standardization, The ISO Survey of Certifications, [http://www.iso.org/iso/home/news\\_index/news\\_archive/news.htm?refid=Ref1491](http://www.iso.org/iso/home/news_index/news_archive/news.htm?refid=Ref1491), 2012.
8. International Organization for Standardization: *ISO 9001:2008 Quality management system – Requirements*, Ženeva, 2008
9. Jašarević, S., *QMS u BiH – Pregled stanja – Istraživanje učinaka uvedenog sistema kvaliteta u BH organizacijama*, Mašinski fakultet u Zenici, Zenica, 2010.
10. Lazibat, T.; Zakarija, M.: *Kvaliteta u funkciji povećanja konkurentnosti*, Zbornik radova V. Hrvatske konferencije o kvaliteti, Šibenik, 2004., str. 28 – 34. HDK, ISSN 1334 – 7853
11. Sousa-Poza, A.; Altinkilinc, M.; Searcy, C., *Implementing a functional ISO 9001 quality management system in small and medium-sized enterprises*, International Journal of Engineering, 2009., Vol3, Issue 3
12. Tunjić, Đ. *Učinkovitost certifikacije sustava upravljanja kvalitetom prema normi ISO 9001 u metaloprerađivačkoj industriji*, Doktorska disertacija, Strojarski fakultet u Slavonskom Brodu, 07/2013



## DOES FOREIGN TRADE LIBERALIZATION REDUCE POVERTY IN TURKEY?

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### **ABSTRACT**

*Economic liberalization was one of the main components of stabilization policies implemented in the 1970s in many developing countries. In order to overcome the shortcomings of the import substitution industrialization strategy, Turkey started to implement export-led growth strategy in the early 1980s and had become an integral part of the world economy. It is argued that trade liberalization by eliminating the obstacles in front of trade will spur the economic activities in the tradable goods and export sectors and create new employment opportunities. It is expected that trade liberalization leads economic growth and this, in turn, increase per capita income and reduces the poverty.*

*Therefore, the aim of the study is to investigate the effect of trade liberalization on poverty reduction in Turkey by using modern econometric techniques. The empirical findings show that trade liberalization has reduced poverty in Turkey.*

**Keywords:** *Trade liberalization, Poverty Reduction, cointegration, Turkey.*

### **1. INTRODUCTION**

Liberalization of trade expresses the process of removing the direct and indirect barriers in front of international trade, increase in the foreign trade volume, foreign direct investments, and becoming widespread of transnational economic activities and multinational companies. This process is associated with becoming easier and cheaper of communication activities, changes in working conditions and, moreover, cultural change.

In the form supporting the theory of classical economics foreseeing that economies, with opening to foreign countries, will reach higher production and consumption level, while liberalization paves the way for rapid growth in economic meaning, increasing the vulnerability of countries, it brought together with it the negative effects on poverty (Yanar and Şahbaz, 2013:5). According to the classical approach, liberalization of trade makes contribution to economic growth through factor prices. Developing countries are rich from economic point of view. Therefore, it is expected that free trade leads to higher wages. This situation leads poverty to decrease. However, it was seen that unqualified labor force remained the poorest. For example, while the wages of workers graduated from primary school rise with liberalization of trade, the wages of illiterate workers decrease (Winter, 2000: 32).

In a large part of the world in less developed feature, besides liberalization of trade, as a result of financial integration that rapidly increases in especially 1990s, sensitivity and vulnerability against crises increased and crises caused a serious impoverishment. Increase of poverty in the world in absolute meaning and not being able to be corrected of income distribution among and within countries increased the worries and criticisms about liberalization (Danışoğlu, 2008:11).

The subject matter of this study is to study the effects of liberalization of foreign trade on poverty and carry out analysis on Turkey. In the first part of study, the theoretical framework of the relationship between opening to foreign countries and poverty was examined. In the part of application of study, emphasizing datasets and econometric method to be applied, model prediction and the results obtained will be evaluated. In the section of Conclusion, the findings obtained and policy suggestion will be discussed.

## 2. THEORETICAL FRAMEWORK

There is a close relationship between foreign trade and development. In the departments of economics, that economic development and international economics are under the same scientific branch shows that this interaction is so important. Although the subject of liberalization of foreign trade is discussed from many aspects, it is generally expressed that it plays a little role in struggle against poverty. Liberalization of trade provides many resources for coping with poverty and generally makes an influence through income distribution. For average income to increase, liberalization may be an indirect role. However, in a situation that is necessary to be known, most foreign trade reforms will absolutely injure somebody, leave them in a difficult position, or deepen poverty. Even if while some reforms also increase national income in society, they may lead poverty to increase. Therefore, although the general opinion is open for liberalization of trade, the primary question is with what way the outward oriented government policies applied will provide the maximum benefit in reducing poverty and what should be done to intensify poverty (McCulloch et al, 2001:22).

The anti – liberalist views suggest that liberalization will damage to poor peoples from many aspects. For example due to the fact that trade reforms made in the developing countries and flexibility in wage decrease and that intersectorial labor force mobility are limited, they put forward that it will increase the poverty in the short term.

Liberalization of trade reduces the demand to skillful labor force at the expense of unskilled one and, thus, disturbing income distribution, increases poverty. In 1980s and 1990s, especially in Latin America countries, the demand to skillful labor force increase due to the use of high technology and unskillful labor force remained unemployed. As a result, the wage gap between skillful and unskillful labor force also enlarged. For the developing countries, liberalization is a knife-edge case. Just as it creates important opportunities, it can also form a serious danger (Danışoğlu, 2004:6).

From the other aspect, the view for liberalization argues that, since country can use its resources more effectively in long term, growth rate will rise and thus poverty will decrease.

Due to the developedness degrees of countries and different policies, applied as a result of this, liberalization of foreign trade will give different results from country to country. Therefore, analyzing the issue according to the features of countries will provide more accurate results.

We can examine the effect of liberalization of foreign trade on the poor people through 3 channels: First is price transferring channel: the first effect of liberalization on the poor people can be through price variations of goods. That price variations affect the poor people depends on that the poor households are net consumers or net producers of goods. The primary gain of liberalization is of the price variations that occur not of its creating market or its destroying some markets (In case that the trade of some goods are initiated and some goods cannot find a place in markets, it means stop of production ). Besides this, whether or not the price variations in limit reach the poor people. This effect forms, depending on many factors. Especially it shows a change according to the sectorial structure and the that goods is at national or

international level (McCulloch et al, 2001:72). Second is wages channel: liberalization of trade can affect household via employment and wages. If wages are flexible and do not provide full employment, price variations, resulted from liberalization, will also modify wages. But since most of employees are poor, when working areas changes with liberalization, employment will also be affected from this change (Winter,2000:10). Third is the channel of taxes and expenditures: liberalization can affect the poor people with the movements of government in fiscal positions and especially taxes that is an important part of national income. With abolishment of customs duty, the share of decrease occurring in national income can be obtained from constricting the expenditures of social aids. That is, the poor can be negatively affected from the policy government will follow( Winter,2000:12)..

The required economic growth for development is another channel that is important in decreasing poverty. The effect of liberalization of foreign trade on economic growth became the issue of hot discussions in the scope of export oriented growth. Foreign trade, enabling the distribution of production factors between sectors (Grossman and Helpman, 1992; Redding, 1997); increasing domestic competition and, thus, productivity (Greenaway and Milner, 1993; Aghion, Dewatripont and Rey, 1997); enlarging market for the domestic producers and leading to the advantages in scale economies (Taylor, 1994; Grossman and Helpman, 1991); increasing the number of input, whose domestic substitution is not possible and leading to more capacity use (Nishimizu and Robinson, 1986; Quah and Rauch, 1990; Grossman and Helpman, 1992); and lastly, accelerating information flow between sectors and countries (Feder, 1982; Grossman and Helpman, 1992), can positively affect economic growth.

A great majority of the studies carried out on Turkey, which examines the contribution of liberalization of foreign trade to economic growth, showed that the result was positive. ( Ghatak, Milner and Utkulu, 1995; Bahmani-Oskooee and Domac, 1995; Yiğidim and Köse, 1997; Doğanlar and Fisunoğlu, 1999; Özmen et al., 1999; Tuncer, 2002; Bilgin and Şahbaz, 2009). Besides this, it is also possible to meet the studies finding that there was no relationship between becoming outward –oriented and economic growth (Özmen and Furtun, 1998; Hatemi-J and Irandoust, 2000; Şimşek, 2003).

While it is possible to see empirical studies identifying the relationship between becoming outward - oriented and economic growth in the literature, it is understood that the effect of foreign trade on poverty is neglected and it is not made a subject of analysis. However, the relevant literature review above shows that the interaction between foreign trade and poverty is important. Just as this interaction can be directly, it can be in an indirect way. In other words, liberalization of foreign trade may create new employment, wage increases in outward- oriented sectors and, thus, income increase, and it may directly make effect on reducing poverty. In addition, just as assumed in export oriented growth hypothesis, liberalization of foreign trade may create an effect increasing national income. This income increase can also be used to correct the income distribution disturbed especially in democratic countries. This interaction can indirectly arise through income increase.

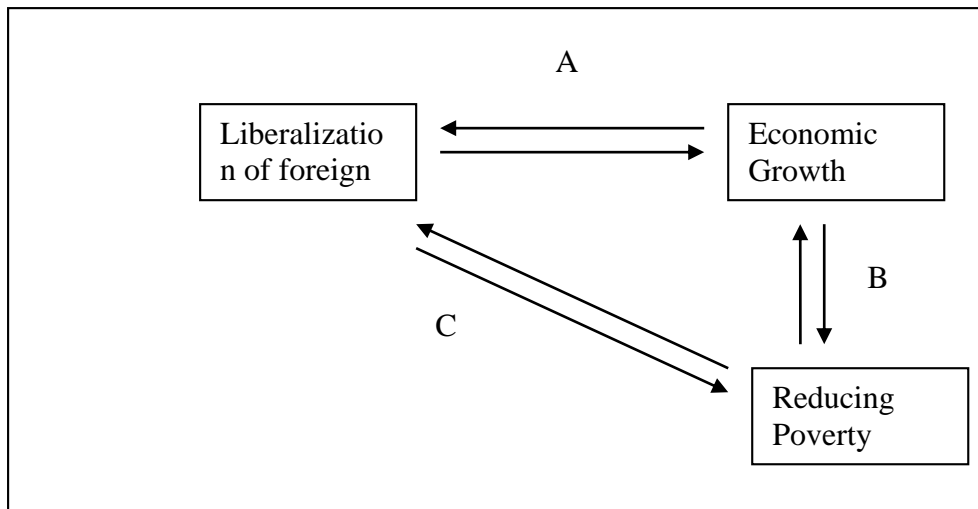


Figure 1. Direct and Indirect Interaction between Foreign Trade and Poverty

According to these discussions, interaction between variables can be crystalized as in Figure 1. C in Figure 1 shows that the direct relationship between foreign trade and poverty can be two directional, while A shows an interaction between liberalization of foreign trade and economic growth in the framework of export oriented growth hypothesis. B reflects that income increasing with liberalization of foreign trade indirectly reduces poverty.

Setting out from this theoretical framework, the dual relationships between liberalization of foreign trade and reducing poverty, and economic growth can be examined in the context of direction of causality (Table 1)

Table 1. Becoming Outward -Oriented, Economic Growth and Reducing Poverty

Model No.	Variables
A	The relationship between liberalization of foreign trade and economic growth
B	The relationship between liberalization of foreign trade and reducing poverty
C	The relationship between economic growth and reducing poverty

### 3. DATA AND METHOD

#### 3.1. Dataset and Its Resources

Turkey, after 1980 Economic Crisis, giving up the applications of policies based on the import substitutive and intervening government approach, adopted an export oriented growth policy. In this frame, first of all, liberalization of foreign trade, then, liberalization of financial structure, and, finally, liberalization of capital movements, with the decree numbered 32, issued in 1989, were provided (Ağır, 2010; Kara, 2002; Taş, 2001).

Dataset of this thesis aiming at examining the effect of foreign trade on reducing poverty covers the period 1970-2010. Liberalization of foreign trade (OPEN) is measured by the rate of the sum of import and export to GDP. For economic development, the variable of GDP per capita (PGDP) will be used.

There are the various measuring method, but it is rather to find a time series directly measuring poverty. In the developing countries, for measuring poverty, it is suggested that in empirical studies, the various proxy indicators (the closest variables) are used. Deininger and Squire (1996) and Lundberg and Squire (1999) put forward that the number of poor individual (head counting scale) is the variable showing poverty the best. However, that the data belonging to this series regarding to many countries are not existent as time series directed researchers to develop alternative scales. In this framework, consumption expenditure per capita, reported in reliable way in the recent years and presenting a highly stable structure, is seen to be used as poverty indicator (Ravallion, 1992; Woolard and Leibbrandt, 1999; Odhiambo, 2008, 2009, 2010). According to Odhiambo (2009), consumption expenditures per capita is also compatible with the definition of World Bank in the form of "not being able to provide a minimum life standard". It is clear that consumption expenditures per capita is not a high quality indicator for poverty. However, in case that there is no time series associated with poverty, using this indicator can enable the indicator aimed findings to be obtained about the developments experienced in the area of poverty.

Based on these discussions, since the number of poor individual (the number of head) for Turkey is interruptedly calculated in the recent time and is not presented as time series, in this thesis, household final consumption expenditures per capita (PHFCE) will be used as poverty indicator.

The data used in the analyses, associated with the variables of GDP per capita, liberalization of foreign trade (OPEN), and household final consumption expenditures per capita (PHFCE) were drawn from OECD database (OECD, 2012).. While the variables per capita are calculated, the data of census were drawn from the database of World Development Indicators of World bank (WB 2012 )

While analysis is carried out, PGDP variables were included in model, taking their natural logarithms. L, in front of the symbols of variables, denotes that logarithm of variable was taken. With defining the variables to be used in the analyses, variable combinations that will be the subject of economic analyses can be rewritten as follows.

*Table 2. Variable Combinations for Economic Analysis*

<i><b>Model</b></i>	<i><b>Variables</b></i>
A	LOPEN, LPGDP
B	LOPEN, LPHFCE
C	LPGDP, LPHFCE

Analyses were carried out by means of Eviews 7.

### **3.2. Stationarity Analysis**

Examination of time series characteristics of the variables used in the model and determination of whether or not the series is stable has an importance in terms of selecting prediction method applied in the analyses. If the common and conditional probability distribution of a stochastic process does not change in time, this series is called as stable in a strong meaning (Charemza-Deadman, 1993:118 ). In other words, if a time series is stable, its mean, variance, and covariance do not vary in time. However, it is known that time series includes a stochastic tendency and that its mean can show a variation in time. If there is a such a situation, it is

expressed that the analyses to be carried out by using these series will lead to the problem of pseudo regression (Granger and Newbold, 1974).

If a series is not stable, it includes unit root. Many tests have been developed toward testing the existence of unit root. In applied studies, Dickey-Fuller (DF), Augmented Dickey Fuller (ADF), and Phillips/Perron tests were used. Whether or not the variables used in the analyses (whether or not they include unit root ) was decided according to the result of these two tests.

*Table 3. Results of ADF Unit Root Tests*

Variables	ADF t Statistics (Level)		ADF t Statistics (First Difference )	
	Without Trend	With Trend	Without Trend	With Trend
<b>LOPEN</b>	-0.865278(0)	-2.139332(0)	-4.770407(0)	-4.717471(0)
<b>LPGDP</b>	-0.494124(0)	-2.896116(0)	-6.390608(0)	-6.291658(0)
<b>LPHFCE</b>	-0.542394(0)	-2.979076(0)	-6.266614(0)	-4.722329(4)
Significance Levels	% 1	-3.605593	-4.205004	-3.610453
		-2.936942	-3.526609	-2.938987
	% 5			-3.529758
	% 10	-2.606857	-3.194611	-2.607932

Note: The value in parenthesis are lagging lengths, selected by using Modified Akaike Criterion. Maximum lagging length were taken as 7.

*Table 4. Results of PP Unit Root Tests*

Variables	t statistics (Level)		t statistics (First Difference)	
	Without Trends	With Trend	Without Trend	With Trend
<b>LOPEN</b>	-0.8695187(2)	-2.467531(1)	-4.652661(4)	-4.594365(4)
<b>LPGDP</b>	-0.477213(2)	-2.983458(1)	-6.390527(2)	-6.291824
<b>LPHFCE</b>	-0.074912(13)	-2.906735	-	-
Significance levels	% 1	-3.605593	-4.205004	-3.610453
		-2.936942	-3.526609	-2.938987
	% 5			-3.529758
	% 10	-2.606857	-3.194611	-2.607932

Note: In PP test, optimal lagging length, Barlett Kernel (Default) Spectral Estimation method, and Newey-West Bandwidth criteria were utilized. The numbers in parenthesis are lagging lengths.

According to the results of both unit root tests, all variables include unit root in respect with their levels; hence, they are not stable. Besides this, when their first differences are taken, our variables of LOPEN, LPGDP and LPHFCE became stable. PP test results support ADF test results. Integration degree of variables is technically 1(1).

### 3.3. Co-integration Analysis

Stationarity discussions in econometrics of time series led alternative methods to be studied. For eliminating the problems in predictions made with non-stable series, in the second half of 1980s, co-integration analyses were developed. Co-integration expresses that the variables that economic theory foresees long termed relations between them will not go away from each other (Kadilar, 1996:78).. From the other aspect, co-integration accepts that the variables that are the subject of analysis will be able to show fluctuations and going away from each other due to some seasonal factors in the short period. In other words, co-integration means that in case that the variables, which economic theory expect that they will move together, are in tendency to go away, with working of market forces or the other policy instruments, the balance between them will be reestablished (Tari, 2002:372) . In this context, co-integration emphasizes that the linear -combinations of one or more variables, even if a variable is not stable, can be stable (Charemza and Deadman, 1997; Tari, 2002:375 )

Today, co-integration that is commonly used in econometric studies was first developed üby Granger (1986) and Engle and Granger (1987) and acquired a large use of area in the applied economics.

Co-integration approach of Engle and Granger consists of two stages (Gujarati, 1999:726-730 ). In the first stage, two or more non -stable variables (Equation 1) are estimated by least squares method (LSM)

$$Y_t = \alpha + \beta X_t + u_t \quad (1)$$

Error term ( $u_t$ ), obtained from the estimation made by LSM, is subjected to stationarity test with the approach of Dickey Fuller (DF) or Augmented Dickey Fuller (ADF) unit root. If error term is stable, it is expressed that the estimated variables are co-integrated and show the existence of a long termed relationship between variables. Second stage is called as error correction mechanism (ECM) and with the variable, made stable (whose difference is taken), and one-period lag of error term, obtained in the first stage, ( $u_{t-1}$ ), clearly including in model, estimations are made.

$$\Delta Y_t = \alpha + \beta \Delta X_t + \psi u_{t-1} + \varepsilon_t \quad (2)$$

In case that the coefficient of term  $u_{t-1}$  in Equation 2 is negative and statistically significant, it is expressed that Error Correction Mechanisms works. That the sign is negative means that the error made one period earlier is corrected in the short period. The magnitude of lagged error term shows how rapidly the relationship between variables is corrected (Tari, 2002)..

Due to the fact that Eagle and Granger co-integration is easily applicable, despite its common use, it was seriously criticized from some aspects. The first criticism is made toward that this method arbitrarily divides the variables as dependent and independent. In some cases, it was seen that the existence of co-integration was excessively sensitive to the selection of dependent variable. Enders (1995) puts forward that it is unacceptable that Engle-Granger approach

depends on the selection of dependent variable; and that this selection should not change the long termed relationship that should be existent between variables.

The second criticism that Engle and Granger approach reduces the number of long termed relationship between variables to 1. In other words, this method can suggest only one long termed relationship in analyses carried out between two or more variables. However, long termed relationship can increase depending on the number of variable. Specifically, in a model of  $n$  variables, it is suggested that  $n-1$  pieces of long termed relationship will be.

The third criticism is related to the econometric results of one equation predictions. In other words, this method result in emerging of ineffective results (Haris, 1995).). This explanation means that this approach derives the least variance (property of minimum variance ) compared to the other approaches. In other words, if there are variables more than 2 in the model, a relationship more than one is under consideration. This means that in error correction mechanism, co-integration vector more than one will be effective.

Johansen (1988) and Johansen and Juselius (1990), considering the criticisms raised against Engle - Granger Approach, developed a new co-integration approach. The dominance of this method arises from that (i) it does not make any distinction of dependent and independent between the variables that are the subject of analysis at the beginning; that (ii) the number of co-integration vectors that may be present among the variables to be able to use in analysis is detectable; and that (iii) parameters related to co-integration obtain the predictions of maximum probability (Holden and Thompson, 1992:30-31).

Johansen is based on a multi - variable VAR /(Vector Autoregressive ) Model. Following Johansen (1988), aa autoregressive process, whose lag is distributed, can be expressed as follow:

$$X_t = \Pi_1 X_{t-1} + \Pi_2 X_{t-2} + \dots + \Pi_k X_{t-k} + \varepsilon_t \quad (3)$$

where  $X_t$  denotes a vector (including internal and external variables) showing a variable in the number of  $p$ ;  $k$  the number of lagging; and  $\varepsilon_t$ , error term. Equilibrium relationship or vector is in the form of  $\Pi = I - \Pi_1 - \dots - \Pi_k$ . The number of co-integration vectors that may be present among the variables in vector  $X_t$  is determined by the rank of matrix  $\Pi$

The equation can be rewritten in the form vector error correction mechanism as follows (Kadilar, 1996):

$$\Delta X_t = \Gamma \Delta X_{t-1} + \Pi X_{t-2} + \mu + \varepsilon_t \quad (4)$$

where

$$\Gamma = \begin{bmatrix} -(1 - \Pi_{11}) & \Pi_{12} \\ \Pi_{21} & -(1 - \Pi_{22}) \end{bmatrix}$$

and

$$\Pi = \begin{bmatrix} -(1 - \Pi_{11} - \Pi_{13}) & (\Pi_{12} + \Pi_{14}) \\ (\Pi_{21} + \Pi_{23}) & -(1 - \Pi_{22} - \Pi_{24}) \end{bmatrix}$$

It is easily understood that Equation (4) is a form of error correction and  $\Pi$  denotes equilibrium matrix.



Johansen (1988) is interested in the rank of  $\Pi$  coefficients matrix and examines that whether or not this vector has information about long termed relationships between variables. And there are 3 cases here:

- i) If  $\text{rank}(\Pi)=0$ , as explained earlier, VAR transforms into a model, whose first degree difference is taken.
- ii) If  $\text{rank}(\Pi)=p$ , coefficients matrix will have a full rank. This means that variables vector is stable.
- iii) If  $0 < \text{rank}(\Pi) = r < p$ , this means that there are  $r$  pieces ( $n-1$  pcs) of long termed relationship between the variables. This is the case that is met the most in practice.

Johansen (1988) determines the presence of co-integration with the hypothesis  $\Pi = \alpha\beta'$ , where  $\Pi$  and  $\beta$  ( $p \times r$ ) consists of two dimensional matrix. In addition, while  $\beta$  gives co-integration matrix,  $\alpha$  denotes "correction matrix". The small values of  $\alpha$  means that error correction is slow, while its large values, that correction made in each period is rapid.

Johansen (1988), for determining the number of co-integration vector among the variables, suggests the statistics of trace and maximal eigenvalue. In case that statistics of trace and maximal eigenvalue calculated is bigger than critical values, null hypothesis is rejected.

Since Johansen co-integration test is highly sensitive to the establishment of VAR Model, it is necessary to be careful. In determining, the number of lagging, Akaike Information Criterion (AIC), Schwarz Criterion (SC), and Hannan and Quinn (HQ) criteria are suggested. In co-integration analyses, in determining the lagging length regarding the variables taking place in VAR, SC is more commonly used.

Lagging length regarding the models to be predicted are presented in Annex 1. As summarized in Table 5, according to SC criterion, in optimal lagging length, for every three models, 1 (one) lagging is suggested.

*Table 5. Lagging lengths for VAR*

<i>Model</i>	<i>Variables</i>	<i>Lagging Length</i>
A	LOPEN, LPGDP	1
B	LOPEN, LPHFCE	1
C	LPGDP, LPHFCE	1

With 1 lagging, suggested by SC, VAR results obtained for Model A, B, C are presented in Annex 2.

After lagging length is determined for VAR, according to Johansen co-integration method, it can be determined whether or not there is a long termed relationship between the relevant pairs of variables.

Table 6. Johansen Co-integration Test

Model	Variables	Co-integration Tests				Result
		Maximal Eigenvalue	Critical Value % 5	$\lambda$	Critical Value % 5	
A	LOPEN ve LPGDP	19.40*	15.89	26.01*	20.26	There is co-integration
		6.60	9.16	6.60	9.16	
B	LOPEN ve LPHFCE	13.80	15.89	21.34*	20.26	There is co-integration
		7.54	9.16	7.54	9.16	
C	LPGDP ve LPHFCE	10.56	15.89	17.72	20.26	There is no co-integration
		7.16	9.16	7.16	9.16	

According to statistics of trace and maximal eigenvalue, between the variables taking place in Model A (LOPEN and LPGDP ) and Model B (LOPEN and LPHFCE), it is understood that there is one piece of long termed relationship from the results of Johansen Approach in Table 6. It was seen that the variables taking place in Model C (LPGDP and LPHFCE) were not co-integrated and it was not observed that there was a long termed relationship between the variables. Co-integration analysis, developed by Granger (1986) and Engle and Granger (1987), deeply affected the direction and interaction of causality relationship between the variables. After co integration analysis, the information obtained in the long period is included in analyses via error correction mechanism (ECM) in the short term. Applying this new approach is only possible with only the presence of co-integration between variables.

Since between the variables taking place in Model C, a long termed relationship (co-integration) was not detected, analysis can only be conducted by means of traditional standard causality test (Granger, 1969). Before unit root tests regarding the stationarity of time series and co-integration analyses were not developed, the studies on direction of the causality between variables can be realized, based on Granger's (1969) original article (Taban, 2006)

For Model A and B, long term vectors are presented in Table 7. According to the first variable subjected to analysis, for these normalized vectors, GDP per capita positively affects openness (becoming outward-oriented). When this is normalized according to LPGDP, this means that openness positively affects GDP per capita. In similar way, between openness (LOPEN) and household final consumption expenditure per capita, it is seen that there is a positive relationship in long term.

Table 6. Co-integration Vectors

Model No	Long term relationship
A	LOPEN = -11.98 + 2.2 LPGDP (1.24) (0.18)
B	LOPEN = -12.8 + 2.45 LPHFCE (1.89) (0.29)
Note	The numbers in parentheses indicate standard error .

### 3.4. Causality Analysis

Although co-integration analysis shows whether or not there is a long termed relationship between variables, it does not give any information about the direction of causality between variables. For the direction of causality between two variables to be able to be empirically tested, there are various causality tests (Geweke et al 1983; Granger, 1969; Sims, 1972). In empirical studies, Granger (1969), due to the easiness in applicability of standard causality test, is the most favorable method. However, toward the late 1980s, after co-integration analysis was developed, instead of Standard Granger Causality test, causality test based on Error Correction Mechanism, (ECM) suggested by Granger (1986) and Engle and Granger (1987), has been carried out.

According to this new approach, if co-integration is provided to be between two variables (for example, let LOPEN represent openness (liberalization of foreign trade), LPGDP, GDP per capita), Engle and Granger (1987) show that there is an Error Correction Mechanism (ECM) eliminating unbalances in short term. This means that the variations in dependent variables is a function of the variation in explanatory variables and lagged error term in co-integrated regression.

Model A (the relationship between LOPEN and LPGDP) is technically expressed with the terms of Vector Error Correction Mechanism (VECM) as follows:

$$\Delta LOPEN_t = \alpha_1 + \sum_{i=1}^m \beta_{1i} \Delta LOPEN_{t-i} + \sum_{i=1}^n \gamma_{1i} \Delta LPGDP_{t-i} + \sum_{i=1}^r \delta_{1i} ECM_{r,t-1} + u_t \quad (1)$$

$$\Delta LPGDP_t = \alpha_2 + \sum_{i=1}^m \beta_{2i} \Delta LOPEN_{t-i} + \sum_{i=1}^n \gamma_{2i} \Delta LPGDP_{t-i} + \sum_{i=1}^r \delta_{2i} ECM_{r,t-1} + u_t \quad (2)$$

where  $\Delta$  represents that the first difference of variable is taken (that series is made stable) In this VECM, the source of causality can be determined in some ways (Charemza and Deadman, 1997; Demetriades and Hussein, 1996; Islam, 1998; Masih and Masih, 1995, 1998);

- a) with statistical significance of F or Wald  $\chi^2$  test jointly applied to the sum of laggings of each explanatory variable;
- b) of t-test applied to lagged error correction term, and
- c) of F or Wald  $\chi^2$  test, applied together to total of lagging of each explanatory variable

The indication of Model B in VECM format was not written to avoid repeating. Substituting LPGDP in Equation 1 and 2, with LPHFCE, it can easily be written. In similar way in the tests carried out in related to the coefficients regarding the resource of causality, it can be harmonized.

VECM results, in which vector (ECM) detected among the variables taking place in Model A and B is clearly included, are presented in Annex -3.

In VECM stage, now that lagging of explanatory variables, lagging of error correction term and explanatory variable, and error term is made meaningful together, among the variables taking place in Model A and Model B, the source of causality is presented in Table 8.

Table 8. Source of Causality

	Dependent Variable	Wald Test		t-test	Wald test	
MODEL A		$\Sigma \Delta LOPE_N$	$\Sigma \Delta LPGDP$	$ECM_{t-1}$		F-statistics
	$\Delta LOPE$	-----	-0.57 (0.13)	0.09 (0.21)	$(\Sigma \Delta LPGDP, ECM_{t-1})$	1.6 (0.21)
	$\Delta LPGDP$	<b>-0.12*</b> (0.08)	-----	<b>0.13***</b> (0.00)	$(\Sigma \Delta LOPE, ECM_{t-1})$	<b>11.71***</b> (0.00)
MODEL B		$\Sigma \Delta LOPE_N$	$\Sigma \Delta LPHFCE$	$ECM_{t-1}$		
	$\Delta LOPE$	-----	-0.30 (0.28)	0.007 (0.90)	$(\Sigma \Delta LPHFCE, ECM_{t-1})$	0.59 (0.55)
	$\Delta LPHFCE$	<b>-0.19**</b> (0.04)	-----	<b>0.12***</b> (0.00)	$(\Sigma \Delta LOPE, ECM_{t-1})$	<b>7.15***</b> (0.002)
MODEL C	LPGDP and LPHFCE	Null Hypothesis			F-Statistics	Probability Value
		LPGDP, does not Granger cause LPHFCE			0.30	0.74
		LPHFCE does not Granger cause LPGDP			<b>3.86**</b>	0.03
	Notes	<p>1. <math>\Sigma</math> represents sum of lagging coefficients of the relevant variable</p> <p>2. *, ** and *** represents significance at the levels of 10, 5, and 1, respectively.</p> <p>3. The numbers in parentheses represents p- values (probaility)</p> <p>4. For determining the direction of the relationship between the variables in Model III, standard Granger (1969) causality test was applied. In the productions, made according to this method, in the prediction made without including lagging of Equation 1 and Equation II error term in, through Wald test (F Statistics ) of explanatory variable, applied to coefficients, the direction of causality is determined ((Taban, 2006) )</p>				

According to Table 8, in Model A, in causality examination between LOPE and LPGDP, the null hypothesis that “LPGDP” does not cause LOPE in the context of Granger” can be rejected. The acceptance of this hypothesis is supported by the result of the coefficient of LPGDP, coefficient of ECM, and tests, made regarding the together significance of ECM and LPGDP. On the other hand, the null hypothesis that “LOPE does not cause LPGDP in the context of Granger” is rejected according to statistics obtained from every three channels. Empirical findings reveal that the causality relationship between openness and economic growth is from LOPE to LPGDP. This phenomenon shows that there is case in Turkey, which supports the predictions of export-oriented economic growth.

In Model B, it is understood that the direction of the causality between LOPE and LPHFCE is from liberalization of foreign trade (LOPE) to reducing poverty (LPHFCE). In this model, it is seen that there is a one directional causality.

For Model C, according to the analyses, in which Granger (1969) standard causality test is carried out, the null hypothesis that “LPHFCE does not cause LPGDP in the context of Granger” is rejected. According to this, it is seen that the direction of causality is from LPHFCE to LPGDP

#### 4. CONCLUSION

In liberalization process, initiated to be applied, beginning from 1980s, rapid interactions and transformations experienced in international markets also modified and affected the policies in countries. In the recent time the importance of following the process in terms of its effect on the poor people is increasingly more felt. In these analyses carried out, there is no consensus about that liberalization of foreign trade is effective on poverty. However, in some part of studies, while reaching the conclusion that poverty is improved, in some part of them, it was reached that poverty increase. These different results derived is also resulted from that the different policies, applied by countries, together with liberalization process, affect the consumption of the poor people via income distribution, economic growth, taxes, and wages.

In this study we have carried out on Turkey, the effect of liberalization of foreign trade on poverty was dealt with the data of the period 1970 -2010. In analyses, establishing 3 models; A, B, and C, both direct and indirect effect on poverty were predicted.

When empirical findings, obtained from prediction of Model A, B, and C, are evaluated together, the direction of causality between variables can be summarized as in Figure 2. Liberalization of foreign trade leads direct national income to increase and poverty to decrease ( household final consumption expenditures per capita to increase ). From the other aspect, liberalization of foreign trade did not indirectly (through income increase) reduce poverty. However, it is seen that there is a causality from household final consumption expenditures to national income. This situation can have resulted from the quality of poverty variable selected.

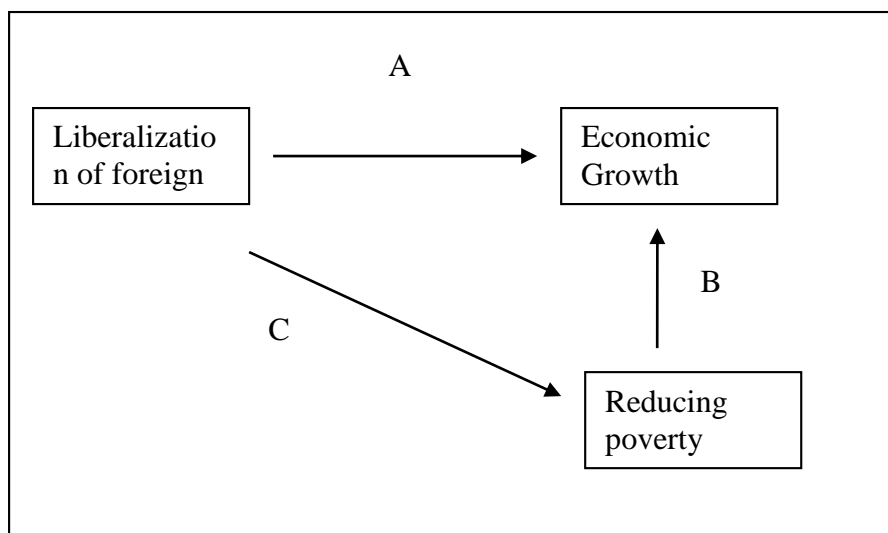


Figure 2. The direction and results of causality between variables

When these findings are collectively evaluated, they reveal that liberalization of foreign trade has an important function in increasing national income and reducing poverty (in increasing of household final consumption per capita). Empirical results obtained have a quality supporting the predictions regarding that in Turkey, economic growth is based on foreign trade and internal demand.

## LITERATURE

1. AGHİON, P., DEWATRİPONT, M. and REY, P. (1997). "Corporate Governance, Competition Policy and Industrial Policy". *European Economic Review*, 41: 797-805.
2. AĞIR, H. (2010). Türkiye'de Finansal Liberalizasyon ve Finansal Gelişme İlişkisinin Ekonometrik Analizi. BDDK Kitapları No:8, Ankara: BDDK.
3. BAHMANI-OSKOOEE, M. and DOMAÇ, İ. (1995). "Export Growth and Economic Growth in Turkey: Evidence from Cointegration Analysis". *METU Studies in Development*, 22(1), 67-77
4. BİLGİN, C. and ŞAHBAZ, A. (2009). "Türkiye'de İhracat ve Büyüme Arasındaki Nedenselli İlişkisi". *Gaziantep Üniversitesi, Sosyal Bilimler Dergisi*, 8(1), 177-198.
5. CHAREMZA, W.W. and DEADMAN, D.F. (1993). *New Directions in Econometric Practice: General to Specific Modelling Cointegration and Vector Autoregression*, Aldershot, Hanst: Edward Elgar Publishing Limited, Cambridge.
6. DANIŞOĞLU, Ç. A. (2004). "Küreselleşmenin Gelir Eşitsizliği ve Yoksulluk Üzerinde Etkileri". *İstanbul Ticaret Üniversitesi Dergisi*. S. 5, Nisan
7. DEİNİNGER, K. and SQUİRE, L. (1996). "A new data set for measuring income inequality". *World Bank Economic Review*. Vol. 10, pp. 565-91.
8. DOĞANLAR, M. and FİSUNOĞLU, M. (1999). "Causality Between Exports and Economic Growth in Asian Countries". *Yapı Kredi Economic Review*. Vol. 10, No.11, pp.3-11.
9. ENDERS, W. (1995). *Applied Econometric Time Series*, Wiley. New York.
10. FEDER, G. (1982). "On Export and Economic Growth". *Journal of Development Economics*. 12: 59-73.
11. GEWEKE, J., R. MEESE and W. DENT. (1983). "Comparing Alternative Test of Causality in Temporal Systems: Analytic Results and Experimental Evidence". *Journal of Econometrics*. vol:21, pp 161-194.
12. GHATAK, S., MILNER, C. and UTKULU, U. (1995). "Trade Liberalisation and Endogenous Growth: Some Evidence for Turkey". *Economics of Planning*, 28(2-3): 147-167.
13. GRANGER, C. W. J., (1969). "Investigating causal relations by econometric models and cross-spectral methods". *Econometrica* 37: 424-438.
14. GRANGER, Clieve and Paul NEWBOLD. (1974). "Spurious regressions in econometrics". *Journal of Econometrics*. 2 (2), ss. 111-120
15. GREENAWAY, D. and MILNER, C. (1993). *Trade and Industrial Policy in Developing Countries: A Manual of Policy Analysis*, London: Macmillan.
16. GROSSMAN, G. M. ve HELPMAN, E. (1991). "Quality ladders in the theory of growth". *Review of Economic Studies*. 58: 43-61.
17. GROSSMAN, G. M. ve HELPMAN, E. (1992). *Innovation and Growth in the Global Economy*. Cambridge MA: MIT Press.
18. GUJARATİ, D.M. (1999). *Temel Ekonometri*, Çeviren: Ü. Senesen ve G.G. Senesen, Literatür Yayıncılık: İstanbul.
19. HARRİS, R. (1995). *Using Cointegration Analysis In Econometric Modelling*, London: Prentice Hall/ Harvester Wheatsheaf.

20. HATEMİ-J, A. and IRANDOUST, M. (2000). Time-Series Evidence for Balassa's Export-Led Growth Hypothesis. *Journal of International Trade and Economic Development*, 9(3), ss. 355-365.
21. HOLDEN, K. ve THOMSON, J. (1992). "Co-integration: An introductory Survey". *British Review of Economic Issues*, 14 (33) 1-55.
22. JOHANSEN, S. (1988). "Statistical analysis of cointegrating vectors". *Journal of Economic Dynamics and Control*. 12, 231-54.
23. KADILAR, C. (1996). "Johansen Eşbütünleşme Analizi". *Hazine Dergisi*. Sayı 3, Temmuz, 77-95.
24. KARA, M., A. (2002). "Sermaye Hareketlerinin Yatırımlar ve Tasarruflar Üzerine Etkisi: Türkiye Örneği". KSÜ, SBE, Yayımlanmamış Yüksek Lisans Tezi. Ağustos, Kahramanmaraş.
25. MCCULLOCH, N., L. A. WINTERS, and X. CİRERA. (2001). *Trade Liberalization and Poverty: A Handbook*. London: Centre for Economic Policy Research and Department for International Development.
26. NISHIMIZU, M. ve ROBINSON, A. (1986). 'Productivity Growth in Manufacturing in Industrialisation and Growth: A Comparative Study'. in H. Chenery, S. Robinson and M. Syrquin (eds.), *Industrialisation and Growth*, Oxford:Oxford University Press for World Bank.
27. OECD, [www.oecd.org](http://www.oecd.org)
28. ODHIAMBO, N.M. (2008). "Financial depth, savings and economic growth in Kenya: a dynamic casual relationship". *Economic Modelling* 25 (4). 704–713.
29. ODHIAMBO, N.M. (2009). "Finance-growth-poverty nexus in South Africa: a dynamic causality linkage". *The Journal of Socio-Economics*. Vol. 38. pp. 320-5.
30. ODHIAMBO, N.M. (2010). "Is financial development a spur to poverty reduction? Kenya's experience". *Journal of Economic Studies*, Emerald Group Publishing, vol. 37(3), pages 343-353, September.
31. ÖZMEN, E. and FURTUN, G. (1998). "Export-Led Growth Hypothesis and the Turkish Data: An Empirical Investigation". *METU Studies in Development*, Vol.25, No.3, pp.491–503.
32. ÖZMEN, A, ÖZER, M. and TÜRKYILMAZ, S. (1999). "Türkiye'de İhracat ve Ekonomik Büyüme Arasındaki Nedenselliğe İlişkin Bir Uygulama Denemesi". Orhan Oğuz'a Armağan, Marmara Üniversitesi Yayını, No. 640, pp.379–392.
33. QUAH, D. and RAUCH, J.E. (1990). *Openness and the Rate of Economic Growth*, Working Paper. University of California.
34. RAVALLİON, M. (1992). *Poverty comparisons: a guide to concepts and methods, living standards measurement study*. Working Paper 88. World Bank. Washington, DC.
35. REDDING, S. (1997). *Dynamic Comparative Advantage and the Welfare Effects of Trade*, Nuffield College Economics Discussion Paper, no. 140.
36. SİMS, C. A., 1972. "Role Of Approximate Prior Restrictions in Distributed Lag Estimation". *Journal of American Statistical Association*. Pp, 169-175
37. ŞİMŞEK, M. (2003). "İhracata Dayalı-Büyüme Hipotezinin Türkiye Ekonomisi Verileri İle Analizi. 1960–2002". *D.E.Ü.İ.İ.B.F.Dergisi*. 18(2), 43–63.

38. TABAN, S. (2006). “Türkiye’de Sağlık ve Ekonomik Büyüme Arasındaki Nedensellik İlişkisi”. *Sosyo-Ekonomi*, 2(2), ss. 31-46.
39. TARI, R. (2002). *Ekonometri*, Alfa Yayınları. İstanbul.
40. TAŞ, S. (2001). “Finansal Liberalizasyon, Uluslararası Sermaye Hareketleri Ve Türkiye Ekonomisi Üzerindeki Etkileri”. *Yayınlanmamış Doktora Tezi*. Afyon Kocatepe Üniversitesi. Sosyal Bilimler Enstitüsü: Afyon.
41. TAYLOR, M.S. (1994). “Once-off and Continuing Gains From Trade”. *Review of Economic Studies*. 61: 589-601.
42. TUNCER, İ. (2002). “Türkiye’de İhracat, İthalat Ve Büyüme: Toda-Yamamoto Yöntemiyle Granger Nedensellik Analizleri (1980–2000)”. *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*. 9(9), 90– 106.
43. WB, [www.worldbank.org](http://www.worldbank.org)
44. WINTERS. (2000). “Trade Liberalisation and Poverty”. PRUS Working Papers 07, Poverty Research Unit at Sussex. University of Sussex.
45. WOOLARD, I., LEIBBRANDT, M. (1999). “Measuring poverty in South Africa”. DPRU Working Papers No. 99/33 (October). Development Policy Research Unit. University of Cape Town.
46. YİĞİDİM, A. and KÖSE, N. (1997). “İhracat ve Ekonomik Büyüme Arasındaki İlişki, İthalatın Rolü: Türkiye Örneği (1980–1996)”. *Ekonomik Yaklaşım*. 8(26), 71-85.



## QUALITATIVE VALUE PROFILING: A REASSESSMENT

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### **ABSTRACT**

*Qualitative value profiling (QVP) is a relatively unknown method of strategic analysis for companies in international business-to-business settings. The purpose of QVP is to reduce the information complexity that is faced by international companies in dealing with business partners. The QVP method allows the development of 1) profiles of the target country in which operations are to take place, 2) profiles of the buying center (i.e. the group of decision makers) in the partner company, and 3) profiles of the product/service offering. It also allows the development of a semantic scaling method for deeper analysis of all involved factors. This paper presents the method and compares and contrasts it with other similar methods like the PESTELE method known from corporate strategy, the STEEPAL method known from scenario analysis, and the Politics-Institutions-Economy (PIE) framework known from International Business. This comparison suggests that QVP on most accounts provides deeper insights than alternative methods and thus lays the foundation for better strategic planning in international business-to-business markets. Hence, it is a valuable addition to the toolbox of business strategists and consequently, for the advancement of international development. Further use of QVP is recommended and suggestions for future research are provided.*

**Keywords:** *Business-to-Business Marketing, Corporate Strategy, International Business, International Development, Qualitative Value Profiling.*

### **1. INTRODUCTION**

Companies all over the world struggle to analyze their environment as part of their efforts to create strategies for building competitive advantage and profits. The need is especially felt in firms operating in international business-to-business markets where turbulence and complexity present more extreme challenges than elsewhere (Duus, 2013). Over the years several methods have been developed to facilitate an analysis of the environment, the most well-known method being PESTELE, originally developed by Aguilar (1967), which today is found in most textbooks on Corporate Strategy and Strategic Market Management (Aaker, 2014). Other well-known methods are the STEEPAL model found in scenario planning (see Duus, 2015 for a criticism of current scenario methodology) and the PIE method developed by Mygind (2007).

The present paper presents the Qualitative Value Profiling (QVP) method, which was developed some years ago by a research team at Copenhagen Business School in order to facilitate environmental analysis for firms operating in international business-to-business settings. It then compares and contrasts the QVP to the other methods and discusses the implications for business and academia.

This paper proceeds in three steps. First, a brisk overview of the historical, theoretical, and methodological context of the QVP is presented. This overview does not attempt to chronicle all the intricacies of the QVP method. It limits itself to an exposition necessary for setting the stage to compare the QVP method to other similar methods. Second, the QVP is compared to other methods like the PESTELE, the STEEPAL and the PIE. Third, the implications are discussed and conclusions are drawn on how to utilize the method in business and research.

While this paper is purely conceptual, the research presented has developed through the two authors' contact and collaboration with several business firms engaged in attempts to successfully crack the code of entering new markets – no matter whether these are geographical markets and/or new segments. Thus, this paper is firmly grounded in practice and may have relevance for a wide variety of managers from firms spanning all parts of the business world; however, those in the global business-to-business sector may benefit most. In continuation of this, we may follow Drucker (1958) in pointing to the crucial role of marketing as the connecting link between supply and demand in international development efforts. Hence, using the QVP can be of significance for economic development.

Last but not least, a note of caution may be in order. While the QVP dates back more than 20 years, it has only been used sparingly. The reason for this is undoubtedly that the original research was published in Danish rather than in English. Accordingly, the process of rediscovery and use of this method is a gradual one in which this paper represents work of a preliminary nature, which hopefully will be extended with better descriptions, a deeper theoretical background, and extensive empirical examples in the years to come.

## **2. QUALITATIVE VALUE PROFILING**

Qualitative Value Profiling was invented just before the turn of the millennium by a research group at Copenhagen Business School (CBS) in Denmark. This group consisted of more than a dozen people from both business and academia and the method was subsequently tested by the Danish firm Superfos Packaging International (Nielsen, 1995). It has since been applied by several Danish firms and by hundreds of business students writing practical assignments at CBS and elsewhere.

In its essence, Qualitative Value Profiling is based on three different perspectives that are vital in order to understand and approach a foreign market successfully. Here, a crucial point is that much of the theoretical background was rooted in a behavioralist perspective as originally developed in the beginning of the sixties by Cyert and March (1992) and applied to the discipline of Organizational Buying Behavior in business-to-business markets (Freytag, 2001; Nielsen, Wilke and Bjerre, 2003).

One of the major implications is that within this perspective, we are not analyzing a market situation per se, but rather another company (in a generalized sense, a business partner) and its decision center (a group of individuals in the firm who together make the crucial decisions). In

a limited sense, if we are trying to sell products and services to this company, then it is called a buying company and the decision center responsible for making buying decisions is called a buying center. Since most international marketing and management efforts involve dealing with firms (in a business-to-business setting) rather than consumer markets and consumers (which are most often the province of local companies catering to a domestic market), the whole task of analyzing an international “market” situation turns into something completely different (Skousen, 2007). In a nutshell, the necessary analysis will logically involve the analysis of societies, firms, the actual goods, and the conditions for trading rather than the analysis of consumer behavior and consumer issues as is so often seen in more ordinary domestic marketing efforts.

Accordingly, the three different perspectives in QVP are 1) Country Profiling, 2) Decision Center Profiling, and 3) Product/Service Profiling (Nielsen, 1995).

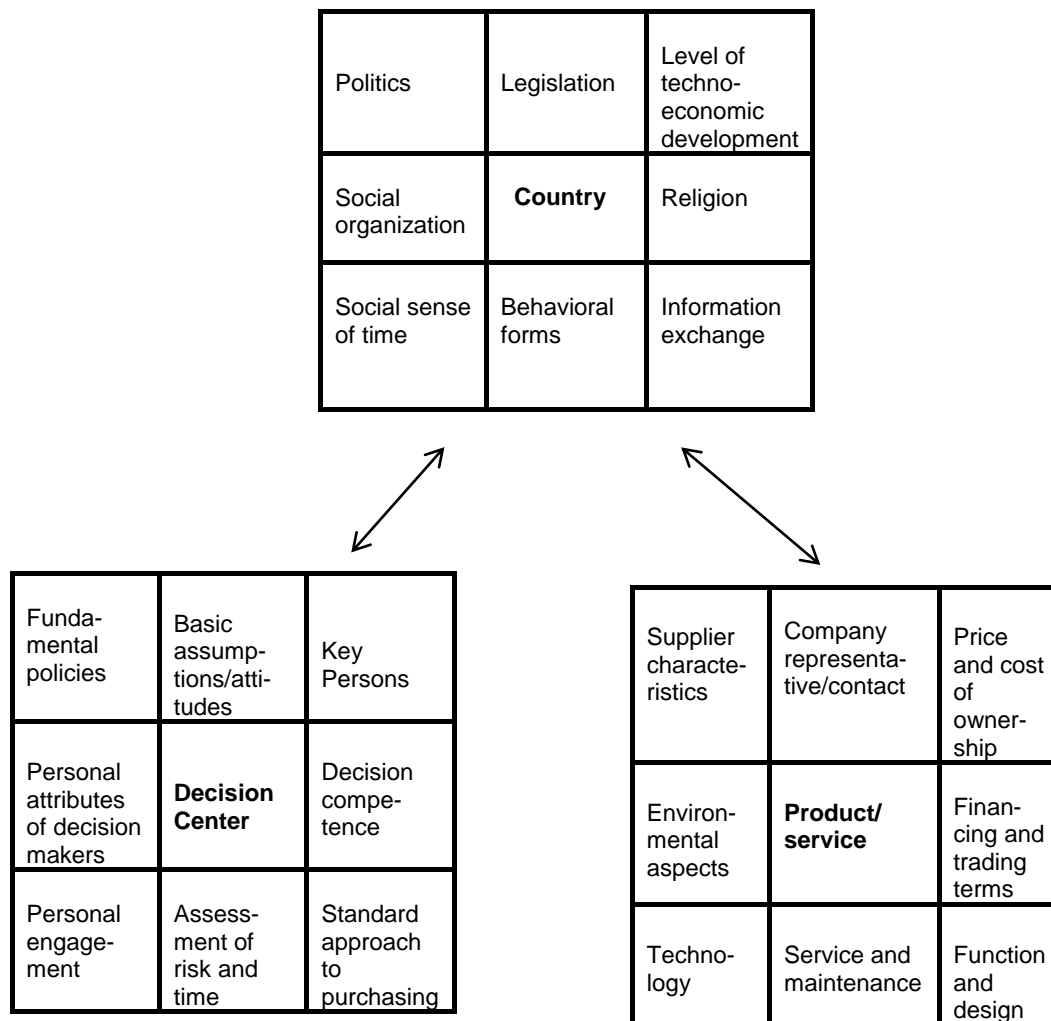
Country Profiling involves analyzing from the macro perspective. It is in essence an analysis of the target country from a bird’s eye perspective. It has eight components: politics, legislation, level of techno-economic development, religion, information exchange, behavioral forms, social sense of time, and finally, social organization.

Decision Center Profiling involves analyzing the group involved in making decisions in the “other” company. In a buying situation, this implies an analysis of the purchasing behavior in the buying firm on the basis of eight components: fundamental policies of the company, basic assumptions/attitudes, key persons, decision competence, standard approach to purchasing, assessment of risk and time, engagement, and finally, personal attributes of the decision maker(s).

Product/Service Profiling involves analyzing the actual trade by looking at the product or service exchanged in relation to eight components: supplier characteristics, company representative/contact, price and cost of ownership, financing and trading terms, function and design, service and maintenance, technology, and finally, environmental aspects.

The various forms of profiling and their interconnections are shown in figure 1.

Figure 1: Components and links between the three perspectives (Nielsen, 1995)



One of the characteristics of the QVP (not visible in figure 1) is the sheer number of factors to analyze and their relation to each other. These factors are organized according to their lateral interaction (such as the interaction between politics and legislation) and hierarchy (taking subdivisions into account). For example, the analysis of a country (country profiling) involves the area of “politics” subdivided into foreign policy (three sub-factors), domestic policy (five sub-factors), and political risk (three sub-factors). “Legislation” is subdivided into general legislation (two sub-factors) and business legislation (eleven sub-factors). “Level of techno-economic development” is subdivided into education (two sub-factors), technology (four sub-factors), and living standards (four sub-factors). “Religion” is subdivided into life philosophy and world view (one sub-factor focusing on the effect on relevant behavior), religious variations (one sub-factor focusing on strength and importance in a cultural and political sense) and religious behavior (five sub-factors). “Information exchange” is subdivided into general communication (four sub-factors), linguistic variations (three sub-factors), and mass communication (five sub-factors). “Behavioral forms” is subdivided into human relations (five sub-factors) and basic forms of courtesy (five sub-factors). “Social sense of time” is subdivided

directly into six sub-factors. “Social organization” is subdivided into societal structure (four sub-factors) and social groups (five sub-factors).

A full country profiling thus necessitates the analysis of eight main areas, 19 subdivisions, and 78 sub-factors. Analogously, a full company/decision center profiling necessitates the analysis of eight main areas, 19 subdivisions, and 68 sub-factors. A full analysis of the product/service offering exchanged (a product/service profiling) necessitates eight main areas, 26 subdivisions, and 68 sub-factors. Despite the broadness implied by all these areas, subdivisions, and sub-factors – the complexity appears manageable through the hierarchical ordering.

A specific feature of the QVP is the use of a semantic scaling method such as has long been familiar from the discipline of market analysis. Applying the method may require data that are quantitative as well as qualitative; however, it does not require figures in the final analysis, as it is based on evaluations. These are subjective, but if the analysis is done by the same individuals, the bias will be the same. The evaluations are the core of the concept – qualitative value profiling – and the qualitative aspect leaves it up to the decision maker to evaluate when “enough is enough”, that is, whether or not you trust and will rely on your own evaluation of the components within the three perspectives.

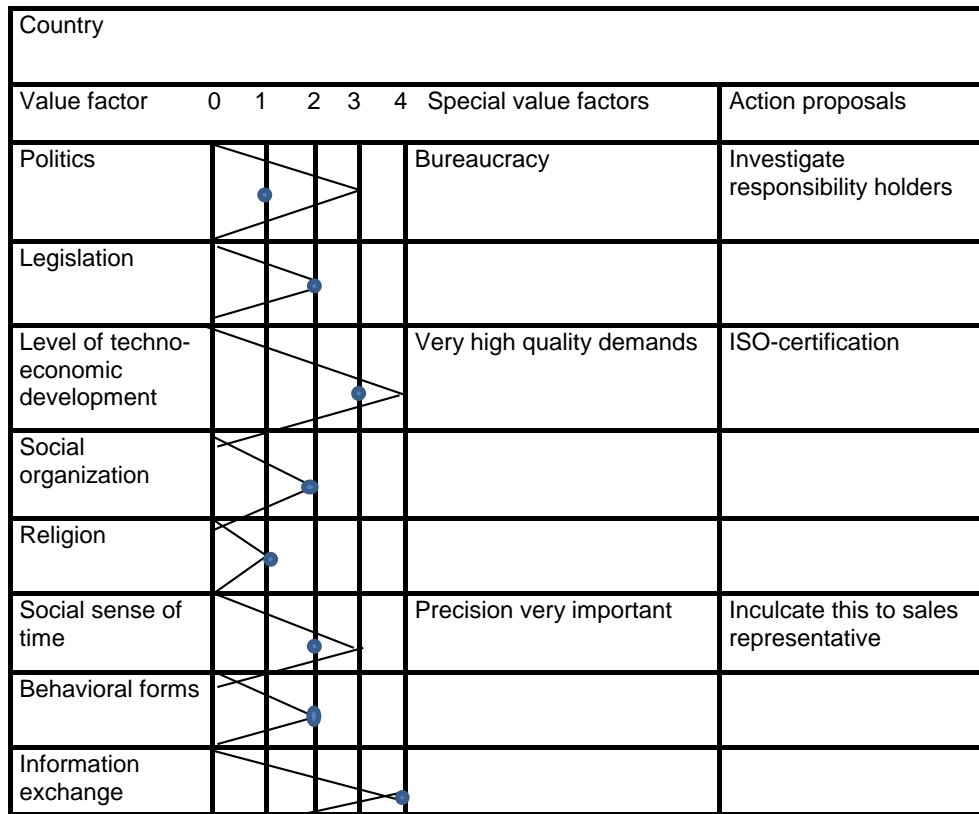
Semantic scaling within the framework of the QVP involves the expression of 1) the importance of the sub-factor (potential problems in country or decision center profiling) or potential importance by key persons in product/service profiling, and 2) the company’s ability to handle said potential problems or importance. The implications are that not just problem/importance areas are identified but also strengths and weaknesses of the firm. Semantic scaling is by nature subjective (i.e. done by individuals) but the use of scaling implies that if it is hard to set a value, this may signify a lack of information that must be remedied.

In practice, semantic scaling in QVP methodology consists of five elements.

- 1) A list of the eight value areas found at the country, decision center, and product/service level.
- 2) A five point scale measuring the importance of each value area on a scale from 0 (no importance) to 4 (very high importance). A line can be drawn through all areas to indicate the “problem profile” of each area.
- 3) A point (dot) on the scale indicating the problem handling ability of our company within the area. Deviations from the line indicating the “problem profile” indicate the need to focus here.
- 4) A field indicating special value sub-factors where our company needs to focus attention.
- 5) A field specifying action proposals that can remedy the situation.

Figure 2 shows an example of how semantic scaling is used in QVP country profiling.

Figure 2: Example of the use of semantic scaling within country profiling  
(Nielsen, 1995)



### 3. OTHER METHODS

Several other methods for analyzing the environment in an international setting exist. The most well-known is undoubtedly the extremely basic PESTELE method, which is founded on work originally done by Aguilar (1967), Andrews (1971), Steiner (1979), and Ansoff (Ansoff and McDonell, 1990; Martinet, 2010) and whose components form an integral part of most modern presentations in Strategy and Marketing (Aaker, 2014; Witcher and Chau, 2014). In its essence this method is so basic in nature that most modern depictions are no longer found in articles and textbooks but instead on webpages providing short descriptions of business strategy methods. As is well known, PESTELE is an acronym for a checklist consisting of P (political factors), E (economic factors), S (social/cultural factors), T (technological factors), E (environmental factors), L (legal factors), and E (ethical factors) – all of which need to be taken into account in an analysis. Very often, the method is shortened to just PEST or PESTEL assuming (often rightfully) that the last few factors are of less importance.

Another method resembling PESTELE is the STEEPAL or STEEPEL method (other acronym variants may be found), which is mostly applied in scenario building efforts. There are no real differences to the PESTELE method as the acronymic letters mostly stand for the same in a different ordering. The one main difference is here that often A (aesthetic factors) are analyzed instead of E (ethical factors). Just like the PESTELE method, this method is so basic that it is most often found on webpages providing short descriptions of business strategy methods.

In both cases, there are no real theoretical underpinnings although the system theoretical and operations research approach by Ansoff (Ansoff & McDonell, 1990; Martinet, 2010; Duus, 2013) undoubtedly could provide such support. Accordingly, an often heard criticism of both PESTELE and STEEPAL is that they are only checklists and should only be used in connection with theories, models, and techniques that would enable content and some real analysis to be made of the various factors in the framework.

A vastly more theoretically well-founded method is the PIE (Politics- Institutions-Economy) framework developed by Mygind (2007) and exemplified by application to the analysis of the transition of post-communist states in Eastern Europe (Mygind, 2011). This method consists of the analysis of three separate sets of factors: P (political factors), I (institutional factors), and E (economic factors). The method is founded on the “new institutional economics” and the ambition is that it should go beyond the simple PESTELE method, which is strongly and rightfully criticized by Mygind for being too simplified, static, and without regard for institutions that are to be seen as key determinants for success. Hence, a better method must get behind the development of institutions. The PIE analysis is holistic and dynamic – implying that economic, political, and institutional developments are understood in relation to each other and may overlap. At the same time, the simplicity of alternative models is sought to be maintained. Politics are analyzed as a power game between various parties and constitutional groups. Social groups and their distribution of power, income, resources, etc. are seen as part of the political theater. The analysis of institutions is divided into the analysis of political institutions (constitution, human rights etc.), informal institutions (culture, social trust, values, religion, norms, preferences, etc.), enforcement (rule of law, courts, etc.), and economic institutions (economic policies, property rights, privatization, regulation, liberalization, incentives, financial markets, etc.). The analysis of the economy takes into account flow (growth, investment, inflation, etc.), policies (economic policies, macro stabilization efforts, etc.), and resources, such as the created (human capital, production structure, technology, infrastructure, etc.) and the natural (geography, natural resources, environment, etc.). Here, various depictions of the method exist that show the analysis of 10-15 factors in each of three PIE sets.

All in all, the PIE is very well founded theoretically and has an intrinsic level of detail, which resembles or exceeds that of the PESTELE and the STEEPAL. It also makes the claim of being more dynamic, which may, however, in the end depend on how supporting models and theories are brought into play in the method. The weak point of the method might, however, be a criticism that could also be said of the other methods: that it is very macro oriented and needs to be supplemented with a number of other methods and models in order to facilitate normative decision making by decision makers in firms on the micro level.

#### 4. COMPARISONS OF THE METHODS

Comparisons of the four mentioned methods show that the QVP has some unique advantages over the three other methods.

First, the QVP is better founded theoretically than the PESTELE and the STEEPAL because it fits with the use of certain macroeconomic models as well as the behavioralist perspective on the micro level (Nielsen, 1995; Nielsen, Wilke and Bjerre, 2003; Duus, 2013). However, it may not be as well founded on the macro side as the PIE, which draws heavily on New Institutional Economics.

Second, the QVP provides for a much broader analysis than the other methods. The QVP analyzes the macro framework as well as aspects on the micro level such the partnering firm, its decision making as well as the exchanged goods. Thus in its essence, the QVP also deals with the micro issues, although this aspect needs to be explored through further research.

Third, the sheer number of factors analyzed in the QVP framework on all levels of analysis is immense compared to the other methods. On the macro side the QVP integrates more factors than any other method. The QVP approach is thus broader than any comparable method.

Fourth, the QVP is better suited for decision making in the firm. This is partly due to the fact that its focus is not just on the macro issues as is the case with the other three methods. But more important here is that the method takes its point of departure in a behavioralist perspective, where the decision making in the firm is center stage. This gives the method a huge advantage when it comes to normative decision making.

Fifth, the QVP allows for detailed analysis through the use of a semantic scaling technique. None of the other methods use semantic scaling. This implies that QVP provides for a deeper analysis.

#### 5. CONCLUSION

This paper has presented the Qualitative Value Profiling method for environmental analysis in international business-to-business settings. The method has been compared and contrasted with three other methods: the PESTELE method, the STEEPAL method, and the PIE method. The comparison is favorable to QVP since this method extends beyond the simple macro perspective to the micro perspective, where it has a significant theoretical founding in the behavioralist perspective. The QVP also looks at more factors on all levels, thus providing a much broader analysis. At the same time it attempts to provide concrete strategic and tactical guidance for the management in firms engaged in international transactions such as selling. In addition, the semantic scaling makes it possible to go into detail, especially with improvements in the offering of products and services. Thus the QVP allows broader and deeper insights on a great many accounts than the mentioned alternative methods and thus provides a foundation for better strategic planning in international business-to-business settings. The weak point of the method is that it is limited to business-to-business settings as societies, firms, and their exchanges (and not markets per se) are the focal points. However, this may not be a problem as most international activities take place in a business-to-business setting. Hence, it may be concluded that this method is a valuable addition to the toolbox of business strategists. Since strategy and



marketing play key roles in economic development (Drucker, 1958), the QVP method may also be seen as a valuable addition to international economic development efforts. We recommend that this method be utilized more in business and that it be thoroughly and properly explored in future research. One way ahead is to research the use of the method in more practical business cases in order to find areas of strength as well as weak spots to improve. Another way ahead is to increase the number of boxes in order to extend the perspective of the method. For example, the method is strong on analyzing the macro issues as well as the micro level, where buyer-seller transactions take place and the product-service offering is exchanged. It is, however, less strong when it comes to analyzing these micro issues as part of an industrial system. Hence, the method could be strengthened on the meso (industrial) level, for example, by the addition of boxes with factors on that level. Here inspiration could be drawn from the Porterian framework (Porter, 1991, Aaker, 2014). In addition, the method may need to be “adapted” to more modern perspectives where exchanges are “relational” rather than “transactional” (Hougaard & Bjerre, 2009). Last but not least, decision makers may benefit from the creation of specific QVP software that would ease much of the analysis. The hierarchical ordering of the areas, sub-divisions, and sub-factors make this a natural thing to do. The overall conclusion is that it is worthwhile for both business and academia to extend their attention to this method and that further use of the QVP can be strongly recommended.

## LITERATURE

1. Aaker, D. A. (2014) *Strategic Market Management* (10 edition), Hoboken: Wiley.
2. Aguilar, F.(1967) *Scanning the Business Environment* (1 edition), London: Columbia.
3. Andrews, K. R. (1971) *The Concept of Corporate Strategy* (1 edition), Homewood: Richard D. Irwin.
4. Ansoff, I and McDonell, E.J. (1990) *Implanting Strategic Management* (2 edition), New York: Prentice-Hall.
5. Cyert, R. and March, J. (1992) *A Behavioral Theory of the Firm* (2 edition), New York: Wiley-Blackwell.
6. Drucker, P.F. (1958) ‘Marketing and Economic Development’, *Journal of Marketing*, Jan, pp. 252-259.
7. Duus, H.J. (2013) ‘Strategic Forecasting: Theoretical Development and Strategic Practice’, *International Journal of Business Innovation and Research*, Vol. 7, No. 3, pp. 362-378.
8. Duus, H.J. (2015) ‘Strategic Scenario Construction Made Easy’, unpublished paper (available upon request), Copenhagen, Department of Marketing, Copenhagen Business School.
9. Freytag, P V. (2001) *Portfolio Planning – in a Relationship Perspective* (1 edition), Copenhagen: Thomson.
10. Hougaard, S. and Bjerre, M.(2009) *The Relationship Marketer –Bridging Dyads* (1 edition), Copenhagen: Samfundslitteratur.
11. Martinet, A-C. (2010) ‘Strategic Planning, Strategic Management, Strategic Foresight: The Seminal Work of H. Igor Ansoff’, *Technological Forecasting and Social Change*, Vol. 77, No. 9, pp. 1485-1487.
12. Mygind, N. (2007) *The PIE Model: Politics – Institutions – Economy – A Simple Model for Analysis of the Business Environment*, CEES Working Paper no. 67, Copenhagen: Department of International Economics and Management, Copenhagen Business School.

13. Mygind, N. (2011) *Transition from Plan to Market – a PIE analysis – 2011*, CIBEM Paper, Copenhagen: Department of International Economics and Management, Copenhagen Business School.
14. Nielsen, O. (1995) *Kvalitativ Værdiprofilering – I International Business-to-Business Markedsføring (Qualitative Value Profiling – in International Business-to-Business Marketing)* (1 edition), Copenhagen: Handelshøjskolens Forlag.
15. Nielsen, O., Wilke, R. and Bjerre, M. (2003) *Organisationers Købsadfærd i Grundtræk (The Essence of Organizational Buying Behavior)* (6 edition), Copenhagen: Samfundslitteratur.
16. Porter, M. (1991) 'Towards a Dynamic Theory of Strategy', *Journal of Strategic Management*, Vol 12, no. 2, pp. 95-117.
17. Skousen, M. (2007) *The Structure of Production* (2 edition), New York: New York University Press.
18. Steiner, G.A. (1979) *Strategic Planning: What Every Manager Must Know* (13 edition), New York: Free Press.
19. Witcher, B.J. and Chau, V.S. (2014) *Strategic Management: Principles and Practice* (2 edition), London: Cengage Learning EMEA.

## PROS AND CONS OF INTERNAL DEVALUATION IN THE EU

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### **ABSTRACT**

*The causes and outcomes of internal devaluation policy are in the focus of this research. The analysis is conducted on the sample of EU member states using theoretical and statistical tools. The arguments for the implementation of this policy are summarized and examined alongside the arguments that point to its inefficiency and the long-term negative consequences of putting the brakes on economic development. Emphasis is placed on the PIIGS countries that are most affected by the global economic crisis and the Baltic states that, after a sharp decline, have begun to show growth. The policy of internal devaluation is not applicable in any of the EU member states; the solution should be stronger EU governance which will take the heterogeneity of the EU member states into consideration in the process of creating policies and solution finding.*

**Keywords:** *Baltic states, EU governance, internal devaluation, PIIGS.*

### **1. INTRODUCTION**

Internal devaluation policy became actual during and after the global economic crisis when the international creditors (European Union, European Central Bank and International Monetary Fund- The Troika) have conditioned the approval of credits with the austerity policy measures. The EU member states do not share a common growth model and also they face a slow and unbalanced economic recovery dynamics after the global economic crisis. Some countries had export-led growth, while the countries of South and Central-East Europe based their development on the consumption (demand) growth. That fact (along with the financial integration/openness) is the backdrop of economic decline during the global recession as well as of the slow and inadequate process of post-crisis recovery. On the one hand, there are countries with current account surpluses (such as Germany), on the other hand, many countries are faced with deficits, which fell just under the influence of the crisis which brought in wage cuts, rising unemployment and thus the reduction in personal consumption. It is evident that during and after the crisis, most of the problems (high budget deficit and high public debt growth) were in those countries where growth is based on consumption and with the decline in consumption, economic growth becomes negative or only slightly in plus. These countries are characterized by a drop in competitiveness and by the very limited area for economic policy measures. Obviously a consumption-led growth with growing trends is unsustainable and unable to fulfil the Troika's requirements which are necessary in order to obtain financial aid. Facing the decline of economic activities in the last economic crisis and also a very slow and uncertain economic recovery in the aftermath period, spurred a new analysis of the effects of internal devaluation that has more rarely been the focus of research. However, it has become the subject of analysis in recent years when it is applied in the countries of the monetary union in the EU as well as in other countries with a fixed exchange rate.

The goal of this paper is to contrast the arguments in favour of internal devaluation with the economic analysis and data that shows its negative implications. The theoretical and empirical part aims to deepen the analysis of applicability and implications of internal devaluation in the EU member states especially in so-called PIIGS: Portugal, Italy, Ireland, Greece and Spain but also Baltic states which have applied internal devaluation.

The paper is structured as follows: the second section encompasses the main findings on internal devaluation, the third covers the selection of arguments pro and con the implementation of internal devaluation substantiated with the statistical data and results achieved so far. The fourth chapter is the conclusion.

## **2. INTERNAL DEVALUATION - THEORY AND EXPERIENCES**

Regarding the fact that EU member states have very limited area to apply external devaluation due to the fact that a majority of countries are members of the Eurosystem, i.e. they do not have their own monetary policy and as a consequence therefore, the exchange rate cannot be used as an instrument of influence on developments in the real market, the countries should improve their competitiveness through the internal adjustments, i.e. labour markets. Wage and price flexibility is needed for a smooth working of a monetary union and if an asymmetric shock took place, wage and price adjustment should replace nominal devaluations (Mundell, 1961; De Grauwe, 2012). Therefore, policy discussions have focused on analyses of unit labour costs. A number of economists have concluded that to close the “competitiveness gap,” in particular with Germany, requires downward adjustments in relative wages (Black 2010).

Additionally in the currency union the accent should be on fiscal transfers to buffer asymmetric shocks (if such shocks are highly unlikely) if the union is composed of economically homogenous countries (as the EU is). Fiscal transfers should be part of the institutional architecture of a currency union (Armington and Baccaro, 2012).

Internal devaluation refers to the reduction of salaries in order to maintain the same level of employment and increase productivity. A shift in investment and structural reforms are needed. It is assumed that currency devaluation is the better option, because due to wage rigidity internal devaluation takes longer and therefore generates greater political and social costs.

When we consider internal devaluation it is also important to take into account the role of fiscal policy, which can apply (in recession): fiscal contraction (consolidation) and expansion. According to Keynes it would be better that a country applies expansionary fiscal policy to stimulate falling aggregate demand (and therefore employment).

When we talk about internal devaluation the question is whether we know how it works. Blanchard et al. (2013) are very cautious and warn that it works “in ways different from the textbook adjustment”. The government decision to reduce wages in the public sector does not mean that the same trend will occur in the private sector, so it is possible that private sector wages decline less. The increase in productivity (based on improvement in unit labour costs) was only partly transmitted to prices, leading to an increase in firms’ profit margins.

There are not many papers on the effect of internal devaluation. In the recent period they refer to the Baltic states case as countries which have applied internal devaluation as a way out of crisis and also to the countries of South Europe which are most affected by the crisis. Constantinos and Nellis (2013) explain internal devaluation as a process of price and wage settings through which the countries can improve the price competitiveness i.e. spillover effects on its export and aggregate demand. Bara and Piton (2012) address the effectiveness of internal and external devaluation and they found on the example of Latvia and Ireland that internal devaluation is a slow process allowing only limited adjustment to the price of persistent social costs while on the other hand, external devaluation produces more evident results (examples of Argentina and Iceland). They warn that internal devaluation processes must be backed by a cooperative European strategy.

In Baltic states, the labour market is described as very flexible, especially in terms of downward wage flexibility (Goretti, 2008). ). Latvia is a successful example of internal devaluation policy (Blanchard et al, 2013). The labour market in the Baltic states has the following features: low unionisation, private labour law contract in public administration, easy dismissal rules, use

performance-related bonuses as a form of labour compensation (Eamets, Masso, 2004; Virbickas, 2010). The Latvian authorities decided to maintain their currency peg and adjust through internal devaluation and front-loaded fiscal austerity rather than devalue. Despite the cost of this kind of adjustment: large drop in output, a big increase in unemployment, and substantial emigration, it has resulted in productivity increases, rather than nominal wage cuts, drove much of the unit labour cost reduction which led to an increase in profit margins (rather than a decrease in prices), and to a surprisingly fast supply response.

The effectiveness of internal devaluation policy depends on the specific characteristics of every particular country. So, many authors find it questionable and even limiting. Blanchard et al. (2013) warn that the Latvian experiences cannot be applied to South European countries due to different circumstances - internal devaluation has been a positive mechanism for Latvia because of its specificities but it does not mean that it will be a good solution for other EU member states. Uxo et al. (2014) show the failure of internal devaluation policies in the European periphery (Spain, Portugal and Greece). They found an improvement in current account and trade balance but also indicate that internal devaluation is not sufficient. The wages and unit labour costs have decreased but the real effective exchange rates have improved much less if they are calculated using production prices or export prices. That means that appreciation of EUR cancelled out the effects of internal devaluation. Papadimitriou et al. (2013) show also that the implementation of internal devaluation in Greece is having strong restrictive effects on the disposable income of households and their spending which is not compensated for by a positive contribution of net exports to growth. Armingeon and Baccaro (2012) warn that the internal devaluation policy which is being imposed on Greece, Ireland, Italy, Portugal and Spain is ineffective and counterproductive. Internal devaluation depresses growth, and the absence of growth requires further austerity for governments to regain their fiscal credibility, thus generating a vicious cycle. Eurozone members have lost any meaningful ability to choose among alternative policy options and, as a result, everywhere implement pretty much the same, deeply unpopular, austerity package.

Felipe and Kumar (2014) warn of the Kaldor's paradox - lack of empirical relationship between the growth in unit labour costs and output growth (Kaldor 1978). They also offer a solution of a way to allow fiscal policy to play a larger role in the Eurozone, and to make efforts to upgrade the export basket to improve competitiveness with more advanced countries.. This is referred to in the literature as Adam and Moutous (2014) found that wage reductions in the periphery countries of the euro area can, when the contractionary credit and budgetary policies come to an end, have a non-negligible, albeit modest, effect on future employment growth.

It is clear that the success of internal devaluation highly depends on several factors, but mainly on domestic market flexibility and openness of the economy, which reduce the adverse effects of this policy on domestic demand (Pfannkuche, 2011). Essentially, those features are common to both Latvia and Lithuania. However, further analysis showed that the internal devaluation policy in these economies have been only partially successful. The higher external competitiveness means not only reduction of unit-labour costs, but also a focus on policies reinforcing structural changes in the economy. One of the major sources of imbalance has been the labour market. Over pre-crisis years wages grew much faster than labour productivity. The widening of the gap between wages and productivity was mostly associated with non-tradable sectors like construction, retail trade and transportation, but export-oriented manufacturing also started to feel the pressure. The consequence of this imbalance was pressure on external competitiveness. Internal devaluation has led to competitiveness gains which are reflected in the significantly improved external position and broadly balance the current account positions. Some authors provided the relationship and "contribution" of the "core" developed EU centre to the appearance and widening of the imbalances in South and South-East Europe (Lapavitsas

et al., 2010; Bartlett, 2014; Armingeon and Baccaro, 2012) explains the core-periphery model in the EU through the dependency among highly developed countries and countries of South-East Europe - "core" countries have developed their economies thanks to the export to the South-European countries. The developed EU member states should take a part in solving the problem of South-European countries because they influence their ability to sustain development perspectives. Steinberg and de Cienfuegos (2012) indicate the political and economic risks associated with the German strategy to solve the eurozone's debt crisis. They warn that Germany is leading the reform of the eurozone's governance but it is doing so based on an incomplete diagnosis of the crisis, believing that fiscal austerity will be enough to save the euro.

### **3. RESEARCH**

#### **3.1. Arguments for internal devaluation**

In this part we are going to provide the main arguments for taking the austerity policy. They arise from the internal imbalances in the EU member states. Our analysis will be oriented to the PIIGS and Baltic states as they were most affected by crisis. The selected imbalances and unsustainable trends are:

##### **a) mismatch between wage and productivity growth**

The data show that South and Central-East European countries had high wage growth in comparison with productivity growth and also in comparison with, for example, Germany. During the 2000s wages increased in many eurozone countries especially in Greece, Spain, Portugal, while labour costs in Germany remain broadly unchanged. In that way Germany improved its competitiveness and boosted its export. It has in fact implemented the policy of internal devaluation. Figure 1 shows the average annual growth rates of real labour productivity and unit labour costs (ULC) in the period 2000-2007. The period before the crisis was characterized by faster growth rates of ULC in comparison with productivity growth. It was the situation in PIIGS and also in the Baltic states. In the EU28 productivity growth was slightly higher than the growth of ULC while in Germany ULC has declined and productivity has increased. Figures 2 and 3 show the average growth rates of real productivity and ULC before the crisis, during the crisis and in the post-crisis period. All countries have positive growth rates of productivity before the crisis (the highest were in the Baltic states). During the crisis the productivity declines (even in Germany and EU28) and in the period 2010-2014 most of the countries have positive growth rates of productivity, while Greece and Italy still record negative growth rates.

Unit labour costs have positive growth rates with the peak in the period 2008-2009 for PIIGS countries and Estonia and in 2000-2007 for Latvia and Lithuania. These rates are often higher (even twofold) than the productivity growth rates. Ireland, Greece, Spain and Portugal faced the reduction of ULC in 2010-2014 that is result of EU requirements in order to get financial assistance.

##### **b) Unsustainable level of public debt**

Disproportion between wage (labour costs) and productivity increases highlights another problem - the excessive and unsustainable level of public spending.

Figure 4 presents data about the level of public debt in the PIIGS and in the Baltic states. Greece has the highest level of public debt (share in GDP), followed by Italy, Portugal and Ireland which also have a level of public debt in GDP higher than 100%. Ireland and Portugal have increased public debt in the period 2000-2014 from 36 to 110% and from 50 to 130% respectively. We cannot compare these data with the trend of public debt growth in Greece because there are no reliable data for the year 2000, but the debt has increased from 113 to 177% of GDP from 2008 to 2014. Armingeon and Baccaro (2012) warn that fiscal

irresponsibility was not a common characteristic of the PIIGS countries - in the time when the crisis hit their fiscal position differed considerably and only Greece had a fiscal problem before the crisis while in other countries fiscal imbalances were largely the result of economic shocks that hit them from 2007 on. But, on the other hand, their common characteristic was declining competitiveness relative to the European core, especially Germany. The Baltic states have lower public debt; it is below 60% of GDP but it also has a growth trend (in Estonia from 5.1% to 10.6% of GDP) in Latvia (from 12.2% to 40% of GDP) from 2000 to 2014 while the Lithuanian debt has increased from 14.6% to 41% in the period 2008-2014.

While interest rate spread of the observed countries towards Germany bond yields remain below 0.5 percentage points in 2000 for all countries except Italy and Greece<sup>40</sup>, the differences are growing and in 2014 it is above 1 percentage point for Spain, Ireland, Italy, Lithuania and EU28 while for Portugal and Latvia it is above 2 percentage points and for Greece almost 6 percentage points. These differences reflect problems with obtaining new financial resources on the international capital markets and also loss of confidence of international investors (which is also evident through the lowering of credit ratings).

#### **c) TROIKA approach and EU governance**

The presented data motivate the EU, in the first place, to think about how to help countries which face the inability to service their debts because all of them are not just EU member states but also Euro area members so their difficulties have spillover effects on the whole EU and on the stability of euro exchange rate. Usually in the situation of financial illiquidity the International Monetary Fund (IMF) provides help as was the case during the last financial crisis. On the EU level there are established mechanisms for helping the countries: the European Financial Stability Facility (EFSF) and the European Stability Mechanism (ESM) in which framework the EU can provide assistance of 500 billion EUR. These amounts seem huge, and they are when it is a question of what is needed to help a small country but in terms of a big country needing help they are limited and insufficient. Because of this, and concurrently with the EU activities, the IMF has also been included in the process of helping countries. The European Central Bank (ECB) sparked controversy by undertaking a range of unorthodox monetary policies—including a program of unlimited bond-buying, the use of negative interest rates, and a \$1.2 trillion quantitative easing plan. It has been placed at the centre of the initiative to create a eurozone-wide banking union, granting the bank new powers of supervision over Europe's largest financial institutions, even as the 2015 resurgence of Greece's debt crisis has renewed questions over the future of the common euro currency.

For member states that have not yet adopted the euro, the Balance-of-Payments (BoP) assistance is available. Providing the financial means by the Troika is not unconditional – the IMF usually apply conditionality in the stand-by arrangements, but now also the EU and ECB require that the financial means will be spent in an appropriate way. They think that the countries should implement structural reforms which should result in decreasing public debt (and budget deficit), improving the current account, promoting export, etc.

The Troika first signed with countries the Memorandum of Understanding and after that the country should present the Economic Adjustment Programme in which the goals and measures are explained. The focus of these programmes is on:

- d) structural reforms to boost potential growth, create jobs, and improve competitiveness;
- e) a fiscal consolidation strategy, aimed at putting the gross public debt-to-GDP ratio on a firm downward path in the medium term and reducing the deficit below 3%;

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<sup>40</sup>There are no data for the Baltic states for 2000, and for Estonia there are no data even for the more recent period.

- f) a financial sector strategy with efforts to safeguard the financial sector against disorderly deleveraging through market based mechanisms supported by backstop facilities. This is specially the case in Cyprus and Spain.

The first EU member state that needed help was Greece, and it received two packages from the IMF, EU and ECB that amounted to more than 240 billion EUR (European Commission, 2015). The Greek problem was not solved with this amount and now, after the political turbulence in Greece and the election of Syriza (January 2015) which promotes anti-austerity policy and disobedience to the EU, the Troika negotiates with the Greek government through Economic Adjustment Programmes in the context of a sharp deterioration in its financing conditions. In addition to Greece there are seven more EU member states that requested financial help during the last financial crisis: Cyprus, Spain, Portugal, Hungary, Ireland, Latvia and Romania. In the process of repaying their debt the countries are under special supervision from the European Commission, so called Post-Programme Surveillance (PPS) until at least 75% of the financial assistance received has been repaid. The objective of PPS is ultimately to measure a country's capacity to repay its outstanding loans to the international creditors (European Commission, 2015).

From the review of countries that needed financial help during and after the global economic crisis it is evident that the assistance is usually oriented to reducing the dynamics (speed) of public debt growth and to boost competitiveness (reduce current account debt) through: wage decreases in the public sector, increase of tax rate, pension system reform, wage and price flexibility. It is evident the increase of taxes and public sector wage reduction (among other measures) are common to all countries and that means that they are forced to implement internal devaluation.

In this chapter we pointed out that it really was time for something to be done to address the negative trends of public debt increasing, the fall in GDP, the high current account deficits. Internal devaluation was imposed by international creditors and below we will show its disadvantages.

### **3.2. Arguments against internal devaluation**

#### **a) Internal disequilibrium**

It is worth noting that austerity policy is not accepted by the public and that in many countries these programmes had political repercussions (Ireland, Portugal, Spain and Greece) - early elections and new governments. The most interesting change was the Syriza party in Greece which was elected in January 2015 promising a different policy than that advocated by the Troika. But in June 2015 the issue of repaying the debt arose and Greece closed the banks for the period of a few weeks and limited the amount of money people can withdraw from ATMs. This was followed by the resignation of the minister of finance and a huge turn in government policy from rejecting the EU advice and programmes towards negotiating on fresh possibilities of obtaining the money from the EU and other international creditors.

Almost all the observed countries are now in the PSP and the results of austerity policy are important.

One of the biggest problems in the EU at the beginning of and during the financial crisis was the increase in unemployment. The unemployment rate increased from 7% (in 2008) to 10.2% (in 2014) while over the same time period the unemployment rates in Greece and Spain rose from 8.4 to 26.5% and from 8.2 to 24.5% respectively (Eurostat, 2015).

The rise in unemployment together with the reduction of wages produced smaller demand i.e. private and government consumption. GDP growth became negative at the peak of the financial crisis (-4.4 % for EU28 in 2009), and after 2009 most EU member states started slow recovery with low, but positive growth rates. Although the fall of GDP was highest in Latvia (-14.2%),



Estonia (-14.7%), Lithuania (-14.8%) in 2009, they found a way out of recession and in the period 2011-2014 they had growth rates from 1.6% to 6.1% annually. Among PIIGS countries the highest falls of GDP were in Ireland (-6.4%), Greece (-4.4%) and Italy (-5.5%), etc. but the problem is not just a fall in one year (2009) but retention of stagnation and fall, and a very slow recovery. These data are shown in Figure 6 and confirm the findings of Armington and Baccaro (2012) and Blanchard et al. (2013).

#### **b) euro exchange rate**

The Troika promotes austerity measures and internal devaluation as a solution to fiscal and external imbalances and overconsumption pointing to the problem of decline in competitiveness in the 2000s in PIIGS and some new member states. We have already outlined that the simple way to exert influence on the ratio of export/import prices is through the exchange rate. Some authors find that the EU stimulates the internal devaluation and from the other side the euro exchange rate has been appreciated. If we look at the nominal exchange rate EUR to USD the data shows the appreciation of EUR from 0.92 USD in 2000 to 1.33 in 2015 while the peak appreciation was in 2008 (1.47 USD/EUR). From 2008 till 2015 the exchange rate against USD has been depreciated but it is above 1.25 USD/EUR.

However, it is necessary to emphasize that competitiveness is not just about prices (terms of trade); it is a broad term that involves many other factors such as: education, institutions, market efficiency, innovations, business sophistications, etc (WEF, 2015). The final result of competitiveness should be the higher living standard in a particular country. So, measures of internal devaluation cannot have an influence on all competitiveness determinants, indeed it can worsen the internal balance (unemployment rates) as the data shows in the analysed figures.

#### **c) Fiscal transfers in the EU**

If an currency union (Eurozone) is composed of economically heterogenous countries it is necessary to assure the fiscal transfers to buffer asymmetric shocks. Fiscal transfers should be part of the institutional architecture of a currency union (Armington and Baccaro, 2012; Breuss, 2011). As it stands, the EU budget is very small in comparison with national budgets; it represents only 1.24% of EU GNI and it is spending on agricultural policy, cohesion policy, the role of the EU on the global scene, administration, etc., but there are no specific expenditures for countries hit by asymmetric shocks connected with EMU. The expenditures follow the goals of strategy Europe 2020. So, the fiscal cooperation is very poor and it is unlikely that the situation will change in the near future. In the last five years there have been some initiatives (solidarity) and outcomes such as: establishing the EFSF, the EFS, the Fiscal Compact (Treaty on Stability, Coordination and Governance in the Economic and Monetary Union). Obviously there is a need for strong political support to overcome all the problems in member states.

### **4. CONSLUSION**

Devaluation should improve the country's competitiveness but the implications of internal devaluation become questionable regarding its negative impact on the slowness of economic growth. This research was focused on the EU member states faced with the worst consequences of the global economic crisis. The analysis of statistical data indicates the necessity to do something to stop the existing negative trends (rise of public debt, unemployment, fall and/or slow GDP growth recovery) as well as the need for a reorientation of growth drivers (from domestic to foreign demand).

Among the EU member states, the countries faced with the economic slowdown and the worst consequences of the economic crisis are PIIGS countries and the Baltic states and most of them needed financial assistance from international creditors. They were faced with a decline in competitiveness (because of the wage increase during the 2000s higher than productivity growth). The Troika has played an important role in providing assistance but also in

determining the conditions of that help. They promote the policy of fiscal consolidation and fiscal austerity as well as labour market flexibility, with the aim of reducing the budget deficit and public debt. Indeed, such measures did reduce the current account deficit but problems of unemployment, low growth rates etc, were encountered.

The analysis shows the negative outcome of internal devaluation in PIIGS countries while the Baltic states have, after a period of sharp decline (Latvia lost 25% of GDP in just two years), started to recover and they are achieving high positive growth rates. Probably the adjustment through exchange rate policy would be more efficient and less painful, but this possibility is very limited due the Eurozone and/or fixed exchange rate regime in most of the other EU member states. The euro has appreciated during the period of growth 2000-2008 which also supported the imports and dissimulated exports resulting in current account deficit and in losing competitiveness. The euro is a common story but in the framework of very heterogenous countries, while problems are individual and countries and their inhabitants bear the burden of the crisis.

The EU should change its role in a way to be more oriented to the specific situation of each country and their structural problems to find out if the internal devaluation policy can be effective. One way is through more effort toward greater fiscal cooperation (transfers); rethinking the ECB policy of price stability (should it be changed in some circumstances; ECB should be tolerant to higher inflation in core countries because it will represent the appreciation of core vis-a-vis the peripheral countries) but also political support to the project or euro area as it is composed of heterogenous countries. The last crisis has highlighted these differences and even though it seems that the problems have been solved (except in the case of Greece), there is no guarantee that a new crisis will not appear in the near future and the EU should be prepared to cope with it (not wait until it happens to find a solution).

It should be clear pointed what the EU expect of internal devaluation policy taking into account specificities of every particular country, taking care not to burden its growth perspectives because the total EU growth, productivity and competitiveness is result (sum) of every particular country achievements- so the growth should be the first goal and after that solving the internal and external imbalances (not the opposite, if the results are uncertain).

## LITERATURE

1. Adam, A. & Moutos, T. (2014). *Industry-Level Labour Demand Elasticities Across the Eurozone: Will There Be Any Gain after the Pain of Internal Devaluation?* CESifo Working Paper Series No. 4858. Retrived 10.09.2015. from SSRN: <http://ssrn.com/abstract=2463591>.
2. Armingeon, K. & Baccaro, L. (2012). Political Economy of the Sovereign Debt Crisis: The Limits of Internal Devaluation. *Industrial Law Journal*, 41, 254-275.
3. Bara, Y-E. & Piton, S. (2012). Internal vs. external devaluation. *CEPII*, No. 324. Retrived 12.07.2015. from: [http://www.cepii.fr/PDF\\_PUB/lettre/2012/let324ang.pdf](http://www.cepii.fr/PDF_PUB/lettre/2012/let324ang.pdf)
4. Bartlett, W. (2014). *Interdependence between Core and Peripheries of the European Economy: Secular Stagnation and Growth in South East Europe*. Paper presented at the conference "Economic Growth: Stimuli and Constraints" 6<sup>th</sup> – 7<sup>th</sup> October 2014, Economic Research Institute at BAS, Aksakov, Sofia.
5. Black, S.W. (2010). *Fixing the flaws in the Eurozone*. VoxEU.org, CEPRS Policy Portal. Retrived 15.07.2015. from: <http://www.voxeu.org/index.php?q=node/5838>.
6. Blanchard, O.J., Griffiths, M & Gruss, B. (2013). *Boom, Bust, Recovery: Forensics of the Latvia Crisis*. Brookings Papers on Economic Activity, Fall 2013. Retrived 05.09.2015. from:

- [http://www.brookings.edu/~media/projects/bpea/fall%202013/2013b\\_blanchard\\_latvia\\_crisis.pdf](http://www.brookings.edu/~media/projects/bpea/fall%202013/2013b_blanchard_latvia_crisis.pdf).
7. Constantinos, A. & Nellis, J.C. 2013. Challenging the Raison d'être of Internal Devaluation in the Context of the Greek Economy. *Panoeconomicus*. 60, 813-836.
  8. De Grauwe, P. (2012). *Economics of the monetary union*. Oxford: Oxford University Press, 9<sup>a</sup> edición.
  9. Eamets, R. & Masso, J. (2004). Labour Market Flexibility and Employment Protection Regulation in the Baltic States. *IZA Discussion Paper* 1147, Bonn, p.10–23.
  10. European Commission (2015): Financial assistance in EU Member States. Retrived 08.09.2015 from: [http://ec.europa.eu/economy\\_finance/assistance\\_eu\\_ms/index\\_en.htm](http://ec.europa.eu/economy_finance/assistance_eu_ms/index_en.htm)
  11. Eurostat. Retrived 01.09.2015. from: <http://ec.europa.eu/eurostat/web/interest-rates/data/main-tables>.
  12. European Commission (2015). *Timeline: The Evolution of EU Economic Governance in Historical Context*. Retrived 02.09.2015. from: [http://ec.europa.eu/economy\\_finance/economic\\_governance/timeline/index\\_en.htm](http://ec.europa.eu/economy_finance/economic_governance/timeline/index_en.htm)
  13. Goretti, M. (2008). Wage-Price Setting in New EU Member States. *IMF Working Paper*, No 243. IMF.
  14. Felipe, J. & Kumar, U. (2014). Unit labor costs in the eurozone: the competitiveness debate again. *Review of Keynesian Economics*. 3, 490-507.
  15. Kaldor, N. (1978). The Effect of Devaluations on Trade in Manufactures. In N. Kaldor (ed.) *Further Essays on Applied Economics*. London: Duckworth.
  16. Lapavistas, C., Kaltenbrunner, A., Lindo, D., Michell, J., Paineira, J.P., Pires, E., Powell, J., Stenfors, A. & Teles, N. (2010). Eurozone crisis: beggar thyself and thy neighbor. *Journal of Balkan and Near Eastern Studies*, 12, 321-373.
  17. Mundell, R. (1961). A theory of optimum currency areas. *American Economic Review*. 51, 657-665.
  18. Papadimitriou, D. Nikiforos, B.M. and Zezza, G. (2013). *The Greek Economic Crisis and the Experience of Austerity*. Strategic Analysis. Levy Economics Institute of Bard College. Retrived 02.09.2015. from: [http://www.levyinstitute.org/pubs/sa\\_gr\\_7\\_13.pdf](http://www.levyinstitute.org/pubs/sa_gr_7_13.pdf).
  19. Pfannkuche (2011). *After the Global Financial Crisis—Feasible economic strategies for the -Baltic States*. Retrived 02.09.2015. from: [http://www.hs-bremen.de/internet/forschung/einrichtungen/itd/projekte/baltic/paper\\_-\\_pfannkuche.pdf](http://www.hs-bremen.de/internet/forschung/einrichtungen/itd/projekte/baltic/paper_-_pfannkuche.pdf)
  20. Steinberg, F. & de Cienfuegos, I.M.A. (2012). The New Government Of The Euro Zone: German Ideas, Divergent Interests And Common Institutions. *Revista De Economía Mundial*. 30, 59-81. Retrived 15.07.2015. from: [http://www.sem-wes.org/sites/default/files/revistas/REM30\\_2\\_0.pdf](http://www.sem-wes.org/sites/default/files/revistas/REM30_2_0.pdf).
  21. Uxó, J., Paúl, J. & Febrero, E. (2014). Internal devaluation in the European periphery: the story of a failure. *Working papers*, DT 2014/2. UCLM, Department of Economics and Finance,
  22. Virbickas, E. (2010). Wage and price setting behaviour of Lithuanian firms. *ECB Working Paper*. No 1198. Retrived 15.07.2015. from ECB: [https://www.lb.lt/wp2010\\_nr\\_7](https://www.lb.lt/wp2010_nr_7)

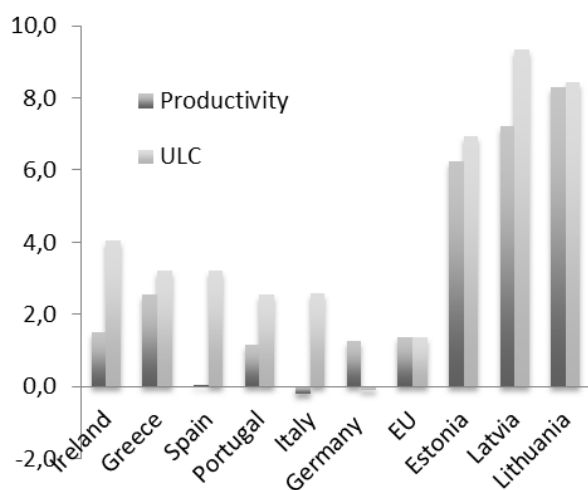


Figure 1. Real labour productivity per person and ULC, annual growth rate in the period 2000-2007, Eurostat

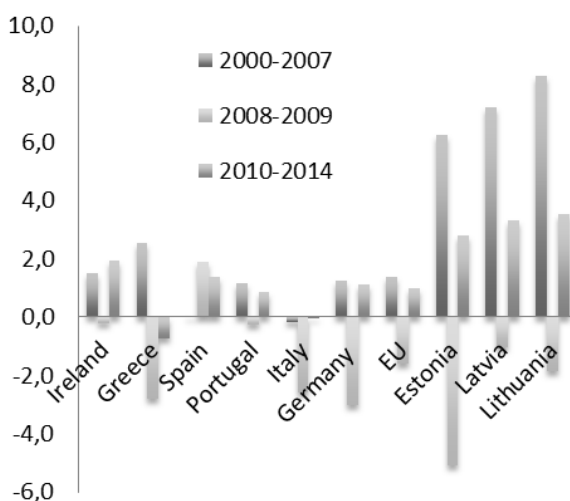


Figure 2. Real productivity average growth rates 2000-2007, 2008-2009, 2010-2014, Eurostat

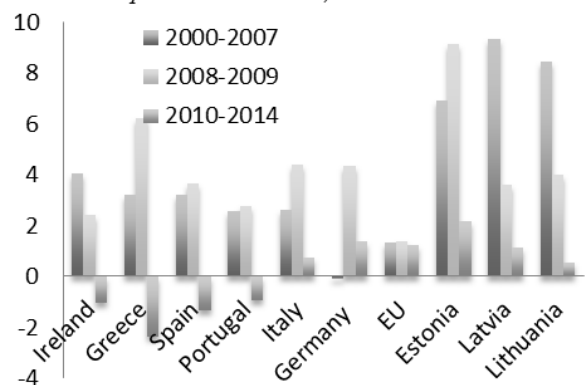


Figure 3. Unit labour costs, average growth rates in period 2000-2007, 2008-2009, 2010-2014; Eurostat

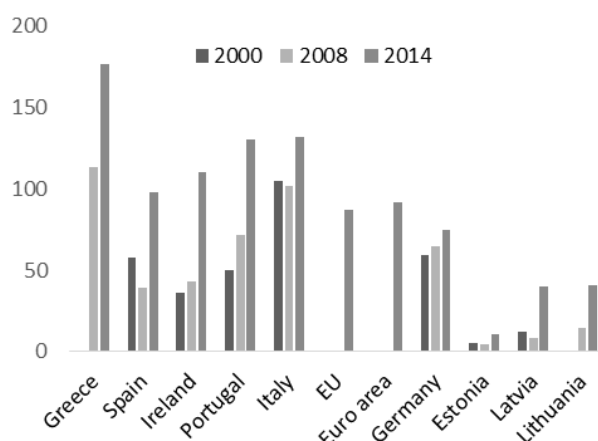


Figure 4. Public debt in the EU (% of GDP), Eurostat

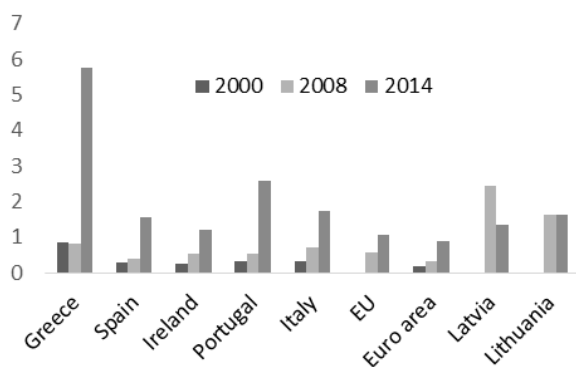


Figure 5. Interest spread towards German bond yields, Eurostat

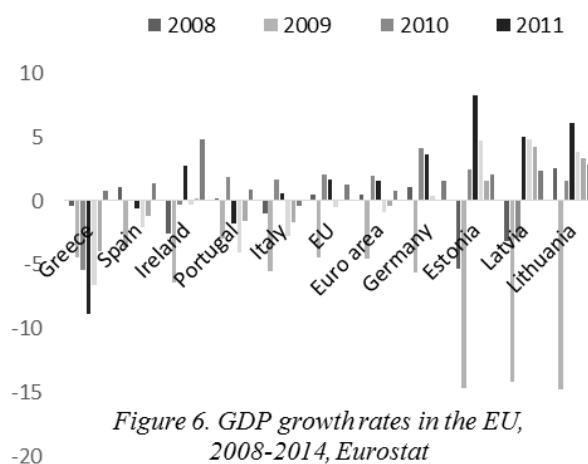


Figure 6. GDP growth rates in the EU, 2008-2014, Eurostat

## THE IMPACT OF FDI OUTFLOWS ON THE UNEMPLOYMENT RATE IN THE SOURCE COUNTRIES

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### **ABSTRACT**

*Over the past three decades the global trends in foreign direct investment (FDI) have been constantly increasing. Whereas FDI outflows have played a positive role in generating economic growth in developing countries, some feel that it plays a negative role in exporting jobs from the source countries to the host countries. This study is motivated by the puzzle in scholarly literature that outflows from high-wage countries serves as an instrument for exporting jobs to low-wage countries. In this paper I will attempt to explain why FDI outflows from “advanced economies”, leading to decrease in GPDI (Gross Private Domestic Investment), do not lead to job losses. It is somewhat paradoxical that with the decline of domestic investment in “advanced economies”, the employment rate does not decrease. The empirical data is based on the relationship between FDI outflows and the employment rate. It is clear that because of expansion of sales FDI outflows complement exports and, consequently, lead not to losses of jobs but to their protection in “advanced economies”.*

*The theory is empirically tested using a sample of “advanced economies” by International Monetary Fund for the years 1960 to 2011. However, the FDI outflows data on such units of analysis as Taiwan and San Marino was not available. As a result, the theory is empirically tested using a sample of 33 “advanced economies” instead of 35.*

**Keywords:** FDI, GPDI, Unemployment rate

### **1. INTRODUCTION**

Over the past three decades the global trends in foreign direct investment (FDI) have been constantly increasing. Whereas FDI outflows have played a positive role in generating economic growth in developing countries, some feel that it plays a negative role in exporting jobs from the source countries to the host countries. This study is motivated by the puzzle in scholarly literature that outflows from high-wage countries serves as an instrument for exporting jobs to low-wage countries. In this paper I will attempt to explain why FDI outflows from “advanced economies”, leading to decrease in GPDI (Gross Private Domestic Investment), do not lead to job losses. It is somewhat paradoxical that with the decline of domestic investment in “advanced economies”, the employment rate does not decrease. The empirical data is based on the relationship between FDI outflows and the employment rate. It is clear that because of expansion of sales FDI outflows complement exports and, consequently, lead not to losses of jobs but to their protection in “advanced economies”.

In the next section I provide information on literature that is used to explain a new theoretical argument that will clarify the crucial role of FDI outflows in the reduction of the unemployment rate in the home country. The theory is empirically tested using a sample of “advanced economies” by International Monetary Fund for the years 1960 to 2011. However, the FDI outflows data on such units of analysis as Taiwan and San Marino was not available. As a result, the theory is empirically tested using a sample of 33 “advanced economies” instead of 35. Yet a strong negative relationship between independent and dependent variables was not found. In the end of the paper, I briefly discuss findings and factors that hampered conducting the research.

## 2. LITERATURE REVIEW

There are a lot of academic materials that focus on the influence of FDI outflows on the source countries. The reason is that with the development of technologies and increasing globalization, the list of factors that influence FDI outflows has been significantly increased. However, the purpose of this paper is to analyze the trends using the most appropriate empirical works. The foundation for the recent literature was laid by Dunning (1958) in his book "American Investment in British Manufacturing Industry". He claimed that the determinants of FDI outflows can be explained by organizational features of Multinational Enterprises. MNEs analyze all factors, which can influence on FDI outflows, before making investment into the target country. These determinants were more thoroughly explored by other respectable researchers.

In his empirical analysis, Culem (1988) notes that such key characteristics of the market as its size, openness, labour costs and its technological level determine FDI decisions. For example, low technological development of the host country will discourage FDI inflows. Blomström and Kokko (1997) evaluate the influence of such factor as borrowing costs on FDI flows. According to them, if borrowing costs in the host country are lower than in the source country, the source country will finance investment through borrowing from the host country. Hatzius (1997), analyzing financial markets of the United Kingdom and Germany, found that comparatively low exchange rates in the target countries attract foreign investors. The body of literature has pointed to a number of research conclusions that determine the relationship between FDI outflows and employment rate.

1) The relationship between FDI outflows and domestic investment. Feldstein (1994) found a negative relationship between FDI outflows and domestic investment. Specifically, he claims that a one unit increase in FDI outflows leads to one unit decrease in domestic investment.

2) The relationship between FDI outflows and exports.

According to Jost's findings (1997), there is a strong complementarity between these two variables. FDI outflows enable to expand production through affiliates, and, thus, complement exports.

3) The relationship between FDI outflows and unemployment rate.

Brainard and Riker (1997) found that FDI outflows from the developed countries to the developing countries complement rather than substitute exports. This means that FDI outflows do not result in an increase in unemployment rate in the source country.

## 3. THEORY

The paper aims at explaining the paradox that for "advanced economies" FDI outflows lead not to job losses but to their protection. Theoretically, there is an indirect relationship between FDI outflows and gross capital formation. The higher FDI outflows, the lower gross capital formation (Al-Sadig 2013). This can be explained by the fact that the source countries, making direct investments in foreign countries, deprive themselves of these investments. Correspondingly, insufficient investment in domestic infrastructure must lead to job losses. However, in practice, outflows from the developed countries complement exports by expanding trade channels (Andersen and Hainaut 1998). In turn, this leads to the decline of unemployment rates in the source countries.

These research conclusions lead me to the following hypothesis.

*Hypothesis: FDI outflows from "advanced economies" do not lead to the decline in the unemployment rate.*

We can see an example of the theory illustrated in the Republic of Korea (one of “advanced economies”). Analyzing the period from 2005 to 2007, one can see that FDI outflows gradually increase from 0.8% to 1.9%. This leads to decrease in gross capital formation from 30% to 29%. Theoretically, decrease in gross capital formation must lead to increase in the unemployment rate; however, in practice, the Republic of Korea had an increase in its unemployment rate from 3.7% to 3.2%. In the next section I will test whether we can make inductive inference from this example.

#### 4. ANALYSIS

I test the theory using the sample of 33 “advanced economies” by IMF (the data on San Marino and Taiwan is not provided by World Bank) for the period 1960 to 2011. The dependent variable is an unemployment rate. The data come from the World Bank’s compilation of data. The unemployment rate is defined as “share of the labor force that is without work but available for and seeking unemployment” (World Bank). For each level of FDI outflows, arithmetic mean of unemployment rate is calculated. Descriptive statistics for the variables are displayed in Table 1, which shows that 6.618% is the average unemployment rate for “advanced economies”.

[Table 1]

The independent variable of interest, FDI outflows, is defined as “an investment that is made to acquire a lasting interest in an enterprise operating in an economy other than that of the investor, the investor’s purpose being to have an effective voice in the management of the enterprise” (IMF). The variable is operationalized using data from World Bank, which represent FDI outflows as the percentage of GDP. The univariate distribution for the independent variable is illustrated in Figure 1. Here one can see that in the period from 1960 to 2001 countries with “advanced economies” did not tend to direct investments in other countries. However, an impressive rise in FDI outflows occurred in 2002 (19,555%). Then, in 2007, it reached the highest point, 23,874%. This shows that with the increasing globalization “advanced economies” become more and more interested in making investments in other countries.

[Figure 1]

FDI outflows are divided in the corresponding groups: low (<1.1%), medium (1.1% - 3.5%), and high (>3.5%). For each group, the average unemployment rate is calculated. According to Figure 1, the relationship between FDI outflows and unemployment rate is not entirely direct because unemployment rate for medium FDI outflows is not consistent with the hypothesis that the higher FDI outflows lead to the lower unemployment rate in the source countries. However, the other part confirms the hypothesis. In particular, unemployment rate for those “advanced economies”, which have high FDI outflows, is less by 1,717% than unemployment rate for “advanced economies”, which have low FDI outflows.

[Figure 2]

To determine the possible relationship between independent and dependent variables I use tables. To determine if two sets of data are significantly different from each other I use a t-test because it is an appropriate tool to compare two means for the reasonably large sample  $n \geq 25$ . The first hypothesis is tested in Tables 2, 3, and 4. Determining the relationship between average unemployment rates for low and medium FDI outflows, medium and high FDI outflows, and, finally, low and high FDI outflows, one can see that in two of three cases the null hypothesis is not rejected ( $.278 < 2.109$  and  $1.784 < 2.160$ ). T-test indicates rather weak relationship between FDI outflows and unemployment rate that is not statistically significant ( $p=.78$  and  $p=.09$ ). Only when I made analysis for the relationship between unemployment rate for medium and high FDI outflows, I found a low probability ( $p=.028$ ) that the relationship happened by chance.

[Table 2]

[Table 3]

[Table 4]

Then, I introduced the control variable for GDP per capita. Sajid Rahman Khattak, analyzing an empirical relationship between FDI outflows and economic output in Pakistan, has noted that GDP has direct influence on outflows, as high GDP leads to high FDI outflows. So, making an inductive inference that Pakistan's case can be applied to the other countries, I use a control variable for GDP per capita. Then, I divided "advanced economies" into two groups: less "advanced economies" and more "advanced economies". For each group, I calculated average unemployment rate. I assumed that the higher the development of the country, the lower unemployment rate. However, this hypothesis was not confirmed. For all cases of less "advanced economies" group, null hypotheses were not rejected ( $.529 < 2.571$ ,  $.669 < 2.571$ , and  $.273 < 2.776$ ). In addition, the probabilities that the relationships happened by chance are very high ( $p=.619$ ,  $p=.533$ , and  $p=.798$ ).

[Table 5 about here]

[Table 6 about here]

[Table 7 about here]

For two out of three cases of more "advanced economies", null hypotheses were also not rejected ( $1.803 < 2.776$  and  $.582 < 2.365$ ). The probabilities that the relationships happened by chance are very high ( $p=.582$  and  $p=.579$ ). However, in comparison with the group for less "advanced economies", the group for more "advanced economies" shows less weak relationship between FDI outflows and unemployment rate. In particular, the research hypothesis was confirmed in the case of medium and high FDI outflows ( $3.169 > 2.228$ ).

[Table 8 about here]

[Table 9 about here]

[Table 10 about here]

## 5. CONCLUSION

The purpose of this paper is to explain the paradox that the FDI outflows do not negatively affect unemployment rate in "advanced economies". From the empirical analysis, one can conclude that there are no convincing explanations on this paradox. So the hypothesis that FDI outflows do not lead to job losses in the source countries did not confirm. However, some points are worthwhile mentioning in this part.

After the research, I did not find evidence that a negative relationship between FDI outflows and unemployment rate exists. So if policy makers of "advanced economies" want to decrease unemployment rate in their countries, they should find alternatives to FDI. With the introduction of control variable, I did not find any relationship between GDP per capita and unemployment rate.

Unfortunately, more convincing evidence on relationship between FDI outflows and unemployment rate could be hampered by the subjective research. In particular, I made my own assumptions that the interval for low FDI outflows is below 1.1%, for medium FDI outflows – from 1.1% to 3.5%, and for high FDI outflows – above 3.5%. If different researchers made this empirical analysis, the results would not be the same. Another problem is that not all necessary information was available for the research. For example, the FDI outflows data on such units of analysis as Taiwan and San Marino was not available.



## LITERATURE

1. Al-Sadig, A. 2013. "Outward Foreign Direct Investment and Domestic Investment: the Case of Developing Countries", *IMF Working Paper*: 7-8.
2. Andersen, P. and P. Hainaut. 1998. "Foreign direct investment and employment in the industrial countries". Bank for International Settlements. *BIS Working Papers* No. 61, Basle: Abstract.
3. Blomström, M. and A. Kokko. 1997. "Regional Integration and Foreign Direct Investment", *CEPR Discussion Paper*, No. 1659.
4. Brainard, S. and D. Riker. 1997. "US Multinationals and competition from low-wage countries", *NBER Working Paper*, No. 5959.
5. Culem, C. 1988. "The locational determinants of direct investments among industrial countries", *European Economic Review*: 885-904.
6. Dunning, J. 1958. *American Investment in British Manufacturing*, George Allen and Unwin, London.
7. Feldstein, M. and C. Horioka. 1980. "Domestic saving and international capital flows", *Economic Journal*: 314-29.
8. Hatzius, J. 1997. "Foreign direct investment, capital formation and labour costs: evidence from Britain and Germany", *Centre for Economic Performance Discussion Paper*, No. 336.
9. Khattak S.R., Iqbal N., Khattak M., and Qadeer A. 2012. "Empirical Relationship Between Foreign Direct Investment and Economic Output in Pakistan", *Interdisciplinary Journal of Contemporary Research in Business*, No. 4: 860.
10. The World Bank, FDI Outflows, accessed April 3, 2013, URL: <http://data.worldbank.org/indicator/BM.KLT.DINV.GD.ZS>.
11. The World Bank (2013). GDP per Capita. accessed April 3, 2013, URL: [http://data.worldbank.org/indicator/NY.GDP.PCAP.PP.KD?page=1&order=wbapi\\_data\\_value\\_2008%20wbapi\\_data\\_value%20wbapi\\_data\\_value-first&sort=asc](http://data.worldbank.org/indicator/NY.GDP.PCAP.PP.KD?page=1&order=wbapi_data_value_2008%20wbapi_data_value%20wbapi_data_value-first&sort=asc)

## FIGURES

Figure 1: The univariate distribution for FDI outflows, 1960-2011

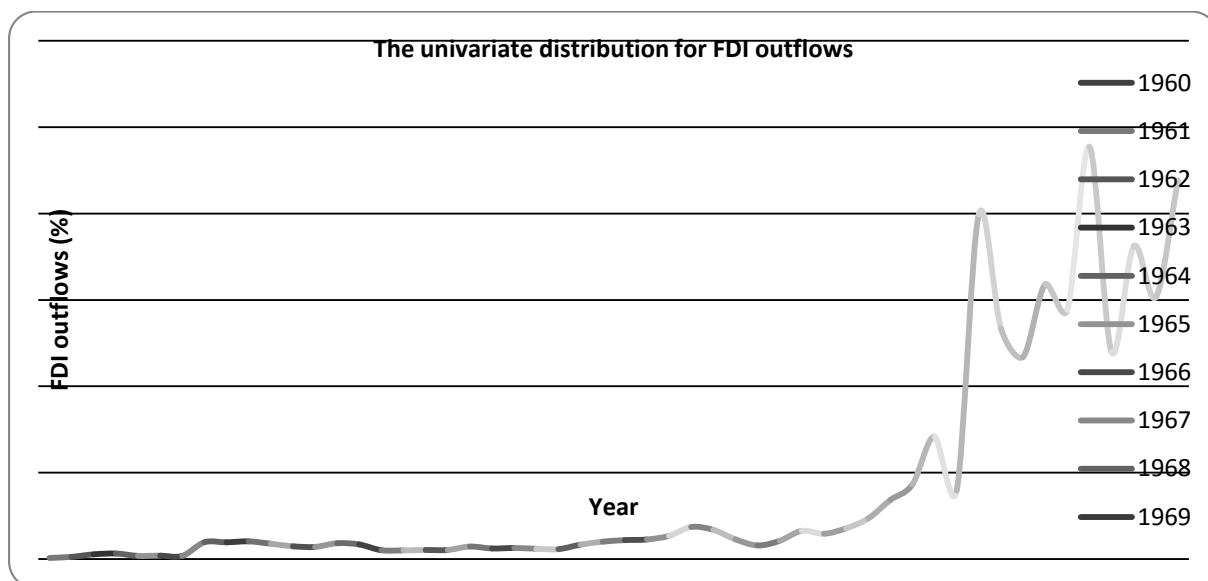


Figure 2: The bivariate relationship between FDI outflows and unemployment rate in

“advanced economies” by IMF, 1960-2011

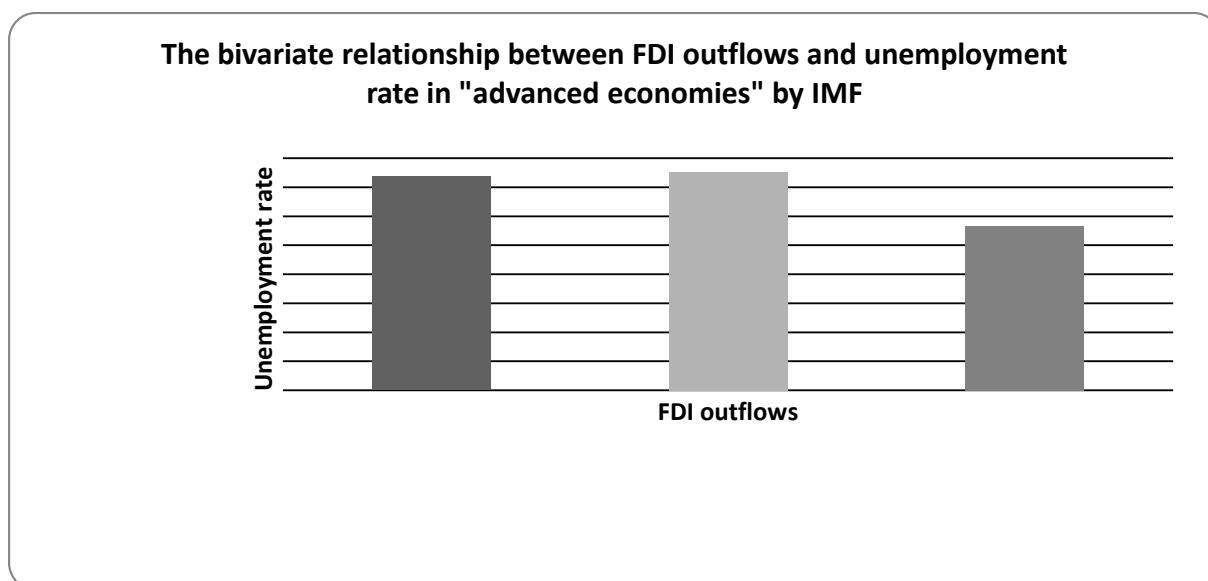


Table 1: Descriptive Statistics for the Variables of Interest, 1960-2011

	Min	Max	Mean	Med	Mode	Var	SD	Obs
FDI outflows (in %)	0	394.72	14.55	2.029	NA	4529.377	67.301	33
Unemployment rate (in %)	0	16.25	6.618	6.338	NA	10.722	3.274	33

Table 2: The Relationship between Unemployment Rate for low FDI outflows and Unemployment Rate for medium FDI outflows, 1960-2011

	Unemployment Rate for low FDI outflows	Unemployment Rate for medium FDI outflows
Mean	7.789167	7.383222
t obtained	.278571	
P(T<=t) two-tail	.783934	
t critical two-tail	2.109816	

Table 3: The Relationship between Unemployment Rate for medium FDI outflows and Unemployment Rate for high FDI outflows, 1960-2011

	Unemployment Rate for medium FDI outflows	Unemployment Rate for high FDI outflows
Mean	7.789167	5.059778
t obtained	2.384752	
P(T<=t) two-tail	.028298	
t Critical two-tail	2.100922	

Table 4: The Relationship between Unemployment Rate for low FDI outflows and Unemployment Rate for high FDI outflows, 1960-2011

	Unemployment Rate for low FDI outflows	Unemployment Rate for high FDI outflows
Mean	7.383222	5.059778
t obtained	1.784114	
P(T<=t) two-tail	.09775	
t Critical two-tail	2.160369	

Table 5: The Relationship between Unemployment Rate for low GDP per capita and Unemployment rate for medium GDP per capita for less “advanced economies”, 1960-2011

	Unemployment Rate for low FDI outflows	Unemployment Rate for medium FDI outflows
Mean	9.49925	8.113
t obtained	.5294	
P(T<=t) two-tail	.619181	
t Critical two-tail	2.570582	

Table 6: The Relationship between Unemployment Rate for medium GDP per capita and Unemployment rate for high GDP per capita for less “advanced economies”, 1960-2011

	Unemployment Rate for medium FDI outflows	Unemployment Rate for high FDI outflows
Mean	9.49925	7.455
t obtained	.669014	
P(T<=t) two-tail	.53313	
t Critical two-tail	2.570582	

Table 7: The Relationship between Unemployment Rate for low GDP per capita and Unemployment rate for high GDP per capita for less “advanced economies”, 1960-2011

	Unemployment Rate for low FDI outflows	Unemployment Rate for high FDI outflows
Mean	8.113	7.455
t obtained	.273116	
P(T<=t) two-tail	.798285	
t Critical two-tail	2.776445	

Table 8: The Relationship between Unemployment Rate for low GDP per capita and Unemployment rate for medium GDP per capita for more “advanced economies”, 1960-2011

	Unemployment Rate for medium FDI outflows	Unemployment Rate for low FDI outflows
Mean	7.363571	4.714
t obtained	1.802786	
P(T<=t) two-tail	.145765	
t Critical two-tail	2.776445	

Table 9: The Relationship between Unemployment Rate for medium GDP per capita and Unemployment rate for high GDP per capita for more “advanced economies”, 1960-2011

	Unemployment Rate for medium FDI outflows	Unemployment Rate for high FDI outflows
Mean	7.363571	4.3318
t obtained	3.168974	
P(T<=t) two-tail	.010005	
t Critical two-tail	2.228139	

Table 10: The Relationship between Unemployment Rate for low GDP per capita and Unemployment rate for high GDP per capita for more “advanced economies”, 1960-2011

	Unemployment Rate for low FDI outflows	Unemployment Rate for high FDI outflows
Mean	4.9652	4.3318
t obtained	.581948	
P(T<=t) two-tail	.578853	
t Critical two-tail	2.364624	

## GLOBAL TRENDS IN THE PUBLISHING INDUSTRY: POST-INDUSTRIAL SOCIETY AND GEOGRAPHICAL DIVERSIFICATION OF THE PUBLISHING SEGMENTS

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### ABSTRACT

*The aim of this paper is to point out the various trends in the publishing industry with respect to environmental factors that are prevalent in a particular geographical segment. The geographical changes in the industry distribution that have occurred as a result of globalization did not miss publishing industry. Publishing industry, as part of the media industry, followed the trends dictated by the countries with most developed media. Within the publishing industry, special attention is paid to the segment of the newspaper industry, which, by the convergence of the technological solutions, is undergoing a transformation of both production and distribution of content. However, the publishing industry can not be analyzed only as a branch of industry because it includes various socio-cultural factors of social development. Comparing the results of research from different geographical areas, trends that will determine the development of the global publishing industry and newspaper production, can be indicated. Sector of the newspaper industry in Croatia, which is associated with the printing industry, follows the trends dictated by the post-modern society.*

**Keywords:** *financial management, media industry, newspaper industry, post-modern society, publishing industry.*

### 1. INTRODUCTION

The publishing industry, especially the production of newspapers and magazines, developed along with industrialization and urbanization. The first document most closely resembling a newspaper was published in Europe in the early 17th century in 1609 (Low 2013: 43). Shortly thereafter, publishing expanded to America and the first newspaper was printed there in 1690. Blanchard (2013) notes that the development of mass culture in the United States found its foothold in a number of key points: extensive development of transport infrastructure and communications networking; development of industrial production and creation of local brands; steady growth of advertising as the basis of creation of mass media; and production of local media content. Picard (1989) was the first to emphasize the dual nature of media products. The product is designed for the market through the sale of contents that the audience craves, but at the same time it is oriented towards the advertising market in order to earn additional income through the sale of advertising space. It was the development of industry and recognizable brands that contributed to an unprecedented expansion of advertising, which fuelled the media industry. In addition, Greco (2015: 61) notes that media content—a picture

or news—has a very short lifespan and soon becomes outdated. It is necessary to keep up with current events in order to take advantage of the power of advertising.

America quickly overtook Europe in newspaper publishing, and by the end of the 19th century a magazine appeared that would achieve a circulation of one million copies. Kosut (2012: 442) notes that since its publication, the women's magazine, *Ladies' Home Journal*, was focused on high levels of society, fashion and branding, and is still published intermittently to this day. The twentieth century and the expansion of capitalism marked the golden age of the newspaper industry. This was supported by rapid technological development, as well as the Fordist mode of production. Increasing circulation and the reduction of costs contributed to overcoming the major input costs, and the newspaper industry became a very profitable business.

By the mid-twentieth century, major corporations unrelated to publishing began taking over newspaper publishers to capture their exceptional profitability, according to Bagdikian (2000: 11). The trigger for such a situation was very simple, but hidden. For a long time news organizations, citing the First Amendment and other legal provisions, did not submit their financial statements to the New York Stock Exchange. However, once big investors found out how profitable news organizations were, they began rapidly taking over these news organizations.

After the 1980s, the newspaper industry reached a point of saturation and ceded priority among media categories to television and its related content. During the late 20th and early 21st centuries, through the convergence and digitization of media industrial production, the newspaper industry has peaked and is beginning to slowly die out in its printed form. The rise of publishing, and subsequently the press, was the classic representative of Modernist industry principles; the creation of digital mass media and the Internet, as well as the development of post-modern society and a post-modern economic paradigm, has forced classical publishing to embark on a complete transformation.

## 2. LITERATURE OVERVIEW

Publishing is part of the media industry, rooted in the invention of the printing press and printing on paper media. Within the media industry, in addition to publishing, are three more basic categories, namely: broadcasting, film and entertainment, and advertising. Publishing is the oldest of all the categories in the media industry and is experiencing the biggest changes. The modern publishing industry, through the convergence and digitization of manufacturing processes, is taking huge steps towards transforming the distribution of content to a whole new platform.

The authors who study media through the focus of media economics and media management take as a starting point the value chain as a fundamental component in determining segments of the media industry and categories within these segments. Wirtz (2011) recognizes two separate value chains in the publishing industry. The first one is recognised as a value chain of newspapers and magazines, and the other as a value chain of books. Straubhaar, et al. (2014), distinguish magazines and books from newspapers and digital forms of media. Picard (2011: 46) on the other hand, distinguishes content based on how it is produced or acquired. Content can either be produced within a media organization or purchased from other authors. In the value chains of the film and music industries, most of the content is produced within media organizations. In contrast, in the value chain of newspapers and magazines, in addition to production within organizations, much of the content is purchased from external sources.

Kung (2013: 7) classifies publishing activities into academic journals, books, newspapers and consumerist magazines. The division is made on the basis of a matrix that classifies content in terms of equipment and function or target group of users. In terms of equipment, academic papers and newspapers belong to textual publishing, while in terms of function they belong to the informational and educational group of content. Newspapers have a broader coverage in the matrix, because besides textual content, they include part of the image and photographic records. Consumerist magazines have the widest coverage, because in addition to all of the above, they also cover the entertainment function. Disher (2014: 81) lists six basic categories of products within the book publishing industry: adult and juvenile trade books, mass market books, professional books, school books, books for students and higher education institutions, and religious books.

### **3. HYPOTHESES**

The transformation of publishing in the last twenty years has had a different pace in different parts of the world. In this regard, research results showed two completely different trends in geographically separate areas. Consequently, we set up the following hypotheses:

1. The publishing industry, as a Modernist industry, experienced negative development trends in geographical areas that entered into a period of post-modernism first.
2. The Croatian media industry showed the same trends of falling circulation as did the media-developed countries.

### **4. GLOBAL PUBLISHING INDUSTRY**

The publishing industry, as a segment of the media industry, was created and developed in Europe. No other segment of the media industry developed as strong of roots and sense of tradition in Europe than the publishing industry. Publishing dates back to the 15th century and the Age of Enlightenment, and it has left a lasting mark on the development of European societies and social relations as a whole. The modern publishing industry has adapted to the technological development and convergence of the media industry. However, regardless of the global adoption of modern technological solutions, Europe remains the region with the highest publishing revenue compared to other geographical areas.

According to data shown in Figure 1, the total global publishing market generated \$308.2 billion in revenue in 2014. The highest revenue of \$116.6 billion was generated in Europe, followed by Asia and the Pacific with \$99.7 billion. With its \$68.9 billion of revenues earned in publishing, the United States, as the most developed media market in the world, is in third place. Europe generated 37.8 percent of total world revenue in the publishing industry, Asia and the Pacific generated 32.3 percent, and the US generated 22.4 percent (Figure 1).

The publishing industry is the oldest segment of the media industry, which reached maturity at the end of the twentieth century. In general one could say that the publishing industry, as a Modernist industry, slowly began to lose its leading position in the maelstrom of media industries due to the development of digital technology and post-industrial society. Digitization and convergence technologies allowed for the distribution of the same content across different platforms. The classical publishing technology slowly began to cede ground to other forms of technological solutions.

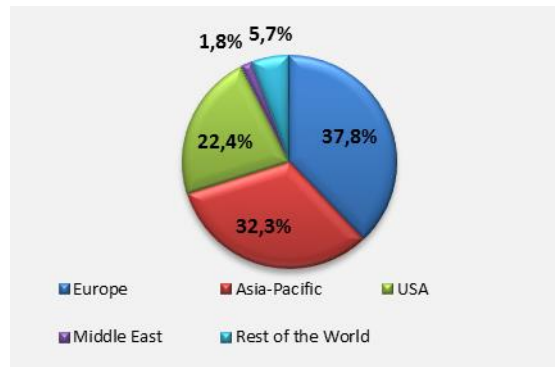


Global publishing  
market geography  
segmentation: \$  
bill. 2014

Region	\$ bill.
Europe	116,6
Asia-Pacific	99,7
USA	68,9
Middle East	5,5
Rest of the World	17,5
<b>Total</b>	<b>308,2</b>

**Table 1. Global publishing market geography segmentation: \$ bill. 2010 – 2014.**

Source: Bussines Source Complete



**Figure 1. Global market publishing share**

Source: Bussines Source Complete (own illustration)

Between 2010 and 2014, the global publishing market recorded steady decline in total revenue, amounting to an average of 0.3 percentage points annually. A slight market recovery occurred in the transition from 2010 to 2011, when the market grew by 0.3 percentage points, after which it continued to decline (Table 2). For the period from 2010 to 2014, the total global publishing market fell from \$312.5 billion to \$308.2 billion, or 1.4 percent.

Global publishing market value:  
\$ bill. 2010 - 2014

	bili. \$	growth (%)
2010.	312,5	
2011.	313,4	0,3%
2012.	311,2	-0,7%
2013.	308,5	-0,9%
2014.	308,2	-0,1%

**Table 2. Global publishing market value: bill. \$ 2010 – 2014.**

Source: Bussines Source Complete (own illustration)

With regard to decline by category in the media industry, newspapers recorded the largest decline in revenue with an 8 percent drop in revenues in 2014 compared to 2010. Although the rate of decline decreased from year to year the downward trend is still present. Magazines show the same trend, but the overall rate of decline was 3.1 percent. In addition, magazines have shown signs of slow recovery and do not have a negative sign in the last period of observation (Table 3).

Unlike newspapers and magazines, books have shown the opposite trend and, for the observed period of five years, total revenue increased by 6.7 percent. The increase in total revenue was stable and showed similar trends from year to year. While other press showed a slowdown, and magazines achieved the same revenue two years in a row, the circulation of books continued to

grow globally. In terms of their share in the global publishing industry for the period from 2010 to 2014, books have increased from 37.8 percent to 40.9 percent. At the same time, newspapers' share fell from 40.3 percent to 37.6 percent. Magazines have experienced a slight decrease from 21.9 percent to 21.5 percent (Table 4).

Global publishing market category segmentation: \$ bill., 2010 - 2014										
	2010	2011	2011 vs 2010	2012	2012 vs 2011	2013	2013 vs 2012	2014	2014 vs 2013	2014 vs 2010
Books	118,0	120,0	1,7%	121,8	1,5%	123,8	1,6%	125,9	1,7%	<b>6,7%</b>
Newspapers	126,0	124,7	-1,0%	121,2	-2,8%	118,3	-2,4%	115,9	-2,0%	<b>-8,0%</b>
Magazines	68,5	68,6	0,1%	68,2	-0,6%	66,4	-2,6%	66,4	0,0%	<b>-3,1%</b>
	<b>312,5</b>	<b>313,3</b>	<b>0,3%</b>	<b>311,2</b>	<b>-0,7%</b>	<b>308,5</b>	<b>-0,9%</b>	<b>308,2</b>	<b>-0,1%</b>	<b>-1,4%</b>

**Table 3. Global publishing market category segmentation: \$ bill. 2010 – 2014.**

Source: Bussines Source Complete (own illustration)

	2010	2011	2012	2013	2014
Books	37,8%	38,3%	39,1%	40,1%	40,9%
Newspapers	40,3%	39,8%	39,0%	38,3%	37,6%
Magazines	21,9%	21,9%	21,9%	21,6%	21,5%

**Table 4. Global market share (own illustration)**

## 5. COMPARISON OF THE PUBLISHING INDUSTRY BY GEOGRAPHICAL SEGMENTATION

On the global market, European publishing has maintained its primacy in revenues earned. The total revenue generated in 2014 amounted to \$116.5 billion. Revenues fell from year to year, at an average rate of 2.1 percent from 2010 to 2014 (Table 5). The decline in revenue increased year to year until the last observation interval when the decline decelerated to 1.3 percentage points compared to the previous year.

European publishing market:

bill. \$, 2010 - 2014

<b>2010</b>	<b>126,8</b>	-
<b>2011</b>	<b>126,0</b>	-0,6%
<b>2012</b>	<b>122,6</b>	-2,7%
<b>2013</b>	<b>118,0</b>	-3,8%
<b>2014</b>	<b>116,5</b>	-1,3%

**Table 5: European publishing market 2010 – 2014**

Source: Bussines Source Complete (own illustration)

In terms of the movement of segments within the European publishing industry, the newspaper industry had the biggest decline of 14.3 percent in the analysed period. Magazines, which are closely related to newspapers, have followed a similar downward trend: the drop was 10.5 percent in the analysed period. The smallest decline in revenue was recorded for the book sales segment, and in contrast to the other two segments, one could say that the decline was only 1.5 percent in the analysed period. These data are interesting for other research because they indicate possible changes in the development of social relations in Europe.

The total share of sales increased in the book industry from 37.2 to 39.9 percent in the analysed period. Compared to the other two segments of the publishing industry, the increase in the share of books in total revenue occurred as a result of the decrease in revenue from the sale of newspapers. The total share of revenue from the sale of newspapers fell from 38.1 percent in 2010 to 35.6 percent in 2014. The share of revenues from magazine sales in total revenues remained at approximately the same level: it declined only 0.2 percentage points, from 24.7 percent of total revenue to 24.5 percent (Table 7).

European publishing market category segmentation: \$ bill., 2010 - 2014

	2010	2011	2012	2013	2014	2014 vs 2010
Books	47,2	47,2	46,8	46,1	46,5	-1,5%
Newspapers	48,4	47,5	45,2	43,2	41,5	-14,3%
Magazines	31,3	31,3	30,5	28,8	28,0	-10,5%
	<b>126,9</b>	<b>126,0</b>	<b>122,5</b>	<b>118,1</b>	<b>116,0</b>	<b>-8,6%</b>

**Tablica 6: European publishing market category segmentation**

Source: Bussines Source Complete (own illustration)

Europe's largest publishing market is Germany, with revenues of \$26.3 billion, or 22.6 percent of the total European market. France and the United Kingdom achieved nearly the same revenue of approximately \$16 billion and take up about 14 percent of the total European market. Italy achieved a \$10 billion turnover, and currently occupies 8.6 percent of the total European market; Spain achieved a \$5.1 billion turnover and occupies 4.4 percent of the European market. The rest of the European market generated revenues of \$42.4 billion which accounts for 36.4 percent of the total market (Table 7).

Segmentation market share

	2010	2011	2012	2013	2014
Books	<b>37,2%</b>	<b>37,5%</b>	<b>38,2%</b>	<b>39,0%</b>	<b>39,9%</b>
Newspapers	38,1%	37,7%	36,9%	36,6%	35,6%
Magazines	24,7%	24,8%	24,9%	24,4%	24,5%
	100,0%	100,0%	100,0%	100,0%	100,0%

**Tablica 7: European publishing market category segmentation**

Source: Bussines Source Complete (own illustration)

We see completely opposite trends in publishing to the United States and Europe in the Asia-Pacific region. While the trends in Europe and the US are negative, and revenues from publishing activities are in continuous decline, revenues from publishing activities in the Asia-Pacific region are increasing steadily. China is a key country in this process, and the development of publishing follows the overall economic development of China. In addition, China and Japan have always had a very strong tradition of a printing and publishing industry. According to the data in Table 8, the total publishing market in the Asia-Pacific region grew on average 3.3 percentage points per year, from \$87.6 billion in 2010 to \$99.7 billion in 2014. The total increase was 13.6 percent.

European publishing market 2014:  
bill. (\$)

Germany	26,3	22,6%
France	16,4	14,1%
UK	16,3	14,0%
Italy	10,0	8,6%
Spain	5,1	4,4%
The rest	42,4	36,4%
<b>Total</b>	<b>116,5</b>	

**Table 7: European publishing market 2014.**

Source: Bussines Source Complete (own illustration)

Asia-Pacific publishing  
market: 2010 – 2014 bill. \$

<b>2010</b>	87,6	
<b>2011</b>	91,9	4,9%
<b>2012</b>	94,6	2,9%
<b>2013</b>	97,9	3,5%
<b>2014</b>	99,7	1,8%

**Table 8: Asia-Pacific publishing market 2010 - 2014**

Source: Bussines Source Complete (own illustration)

By analysing the trends of the various segments of publishing activity, we notice some similarities in the trends with the European publishing industry. In the Asia-Pacific region, the largest increase in revenue in the analysed period was recorded in the segment of book publishing. The increase was as high as 25.3 percent for a period of five years. Revenue from the sale of newspapers increased by 6.8 percent, and revenues from the sale of magazines by 3.7 percent (research results are schematically shown in Figure 9).

Asia-Pacific market category segmentation: \$ mlrd, 2010 - 2014

	2010	2011	2012	2013	2014	2014 vs 2010
Knjige	35,2	37,7	39,8	42,6	44,1	25,3%
Novine	33,6	35,0	35,1	35,5	35,9	6,8%
Magazini	18,9	19,2	19,7	19,8	19,6	3,7%
	<b>87,7</b>	<b>91,9</b>	<b>94,6</b>	<b>97,9</b>	<b>99,6</b>	<b>13,6%</b>

**Table 9: Asia-Pacific publishing market 2010 - 2014**

Source: Bussines Source Complete (own illustration)

Unlike the European market, where we have a negative trend in all three segments of the publishing industry, the Asia-Pacific region has a completely opposite trend. All three segments have positive trends, and the total turnover in the observed period increased by 13.6 percent. We find the similarity with the European trends in the book trade segment. Revenues from book sales had the smallest decline in the European market, with -1.5 percent for a period of five years, unlike in the Asia-Pacific region, where this segment grew the most in the analysed period.

The increase in sales and revenue from sales can be noted also when reviewing changes in the share of individual segments within the publishing industry. The share of books segment in the publishing industry increased from 40.1 percent in 2010 to 44.3 percent in 2014. In the same period, the share of magazines declined from 21.6 percent to 19.7 percent. The largest decline in the total publishing industry was recorded in the newspaper segment, which fell from 38.3 percent share in 2010 to 36 percent share in 2014 (Table 10).

	Segmentation market share				
	2010	2011	2012	2013	2014
Books	<b>40,1%</b>	<b>41,1%</b>	<b>42,1%</b>	<b>43,5%</b>	<b>44,3%</b>
Newspapers	38,3%	38,1%	37,1%	36,3%	36,0%
Magazines	21,6%	20,9%	20,8%	20,2%	19,7%
	100,0%	100,1%	100,0%	100,0%	100,0%

**Table 10: Asia-Pacific publishing market 2010 - 2014**

Source: Bussines Source Complete (own illustration)

China has become the largest publishing market in the Asia-Pacific region. In 2014, the publishing industry generated revenue of \$36.1 billion and overtook Japan on the top of the list with 36.2 percent of the total Asia-Pacific share. Now in second place is Japan, with revenues of \$32.9 billion, or 33 percent of the total regional market. South Korea occupies 5.9 percent of the total market with total revenues of \$5.9 billion, and India occupies 4.4 percent of the total market with revenues of \$4.4 billion. Other markets within this region achieved one-fifth of the total revenues, or \$ 20.5 billion. (Table 11).

Asia-Pacific publishing market segmentation 2014: bill. (\$)		
China	36,1	36,2%
Japan	32,9	33,0%
South Korea	5,9	5,9%
India	4,4	4,4%
Rest	20,5	20,5%
Total	99,8	

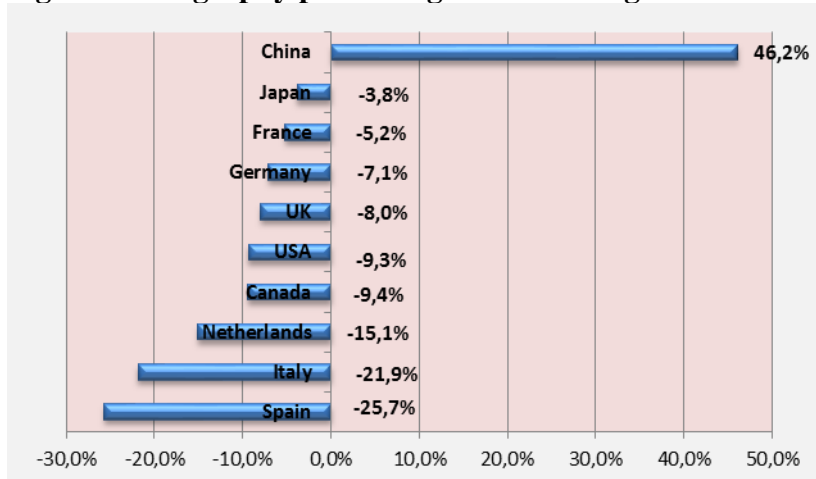
**Table 11: Asia-Pacific publishing market segmentation 2010 - 2014**

Source: Bussines Source Complete (own illustration)

## 6. GLOBAL PUBLISHING INDUSTRY

In terms of generated revenue, the global publishing industry registered a negative trend at the global level, except in China where it grows at extraordinarily high rates. From 2010 to 2014, total revenue from the publishing activity in China rose by 46.2 percent. All other countries analysed recorded negative rates of revenue growth. The smallest decline was recorded by Japan, with 3.8 percent, and the highest by Spain, with 25.7 percent. States of a great publishing tradition (France, Germany, and the United Kingdom) follow Japan at the top of the scale, but register a relatively large decline in revenue year on year. The United States is at the middle of the scale, with a fall in revenues of 9.3 percent; however, it should be noted that the United States were the first to experience declining revenues and that this decline was strongly felt by American publishers. In the penultimate position is Italy, with a 21.9 percent drop in revenues (Figure 2).

**Figure 2. Geography publishing market change 2014 - 2010 (%)**



Source: Bussines Source Complete (own illustration)

The analysis of the distribution of categories (books, newspapers, magazines) within the publishing segment shows the drop in revenues by category in the observed period (Table 12). As in Figure 2, a positive trend of growth was recorded only in China, and there in all categories. The highest revenue growth of 50 percent was achieved by the newspaper sector. Total revenue from sales of books increased by 46.7 percent, while revenues from magazine sales rose by 37.1 percent. In other countries, a negative trend of revenue growth was registered in all categories except for book sales. In France and the UK, we have an increase in revenue from sales of books by 5.6 and 25.9 percent, respectively.

**Global publishing market category segmentation: 2014 vs 2010 (%)**

	USA	Canada	France	Germany	Spain	Italy	Netherlands	UK	China	Japan
Books	-3,2%	-14,3%	5,6%	-0,8%	-30,8%	-15,6%	-17,6%	25,9%	46,7%	-1,3%
Newspapers	-15,6%	-7,1%	-12,3%	-13,4%	-26,7%	-12,8%	-11,1%	-28,9%	50,0%	-2,6%
Magazines	-4,9%	-9,1%	-13,3%	-9,5%	-12,5%	-36,4%	-16,7%	-6,3%	37,1%	-7,3%
Total	-9,3%	-9,4%	-5,2%	-7,1%	-25,7%	-21,9%	-15,1%	-8,0%	46,2%	-3,8%

**Table 12. Global market category segmentation**

Source: Bussines Source Complete (own illustration)

**Publishing industry distribution: 2014 vs 2010 (%)**

	USA	Canada	France	Germany	Spain	Italy	Netherlands	UK	Japan	China
Books	6,8%	-10,1%	10,5%	6,6%	-4,9%	8,0%	0,0%	37,7%	3,1%	0,3%
Newspapers	-6,8%	2,3%	-7,0%	-6,6%	-6,3%	12,8%	3,2%	-23,1%	0,9%	2,5%
Magazines	5,0%	7,5%	-7,7%	-2,7%	18,1%	-19,5%	-3,2%	1,6%	-3,4%	-5,6%

**Table 13. Publishing industry distribution 2014 vs 2010 (%)**

Source: own illustration

A total decrease in revenues from publishing activities was registered for all analysed countries except China; however, within the individual segments, different trends appeared with regard to the distribution of categories within the publishing activity. China, with increasing revenues from the whole publishing industry, recorded an increase of the share of revenue from book

sales in the analysed period by 0.3 percent and from newspapers sales by 2.5 percent, with a decline in the share of revenue from magazine sales. The same process occurred in Japan, where the share of book and newspapers grew by 3.1 percent and 0.9 percent, respectively, while the share of revenues from magazine sales fell by 3.4 percent. In the United States, a media market that dictates development trends, revenues from book sales and magazine sales grew by 6.8 percent and 5 percent, respectively. Revenue from newspaper sales fell by 6.8 percent for the period of five years that was analysed (Table 13).

In European countries, we do not notice a common trend. France, Germany, Italy, and the United Kingdom are increasing the share of revenues from the sale of books. The United Kingdom has increased its share of revenue from book sales to 37.7 percent, which is the largest increase in all of the analysed items through the observed period. In Germany, Spain, and the UK, the share of revenues from the sale of newspapers fell, while in Italy and the Netherlands there was a countertrend of revenue growth. A similar trend was registered with regard to the share of revenues from the sale of magazines. In China and Japan, the trend was negative, while in the United States and Canada, it was positive. In European countries, the share of revenues from the sale of magazines fell, except in Spain and the UK, where this trend was positive.

## 7. OVERVIEW OF THE TRENDS IN THE GLOBAL NEWSPAPER INDUSTRY

Processes in the global newspaper industry mirrored trends in the overall publishing segment. Although publishing in North America and Europe declined, Asian markets showed constant growth trends. Total global market revenue fell by 8.3 percent in the period from 2010 to 2014. All markets for traditional newspaper production recorded a reduction in turnover in the observed period, and the decline is greater than average, except in Japan, where sales fell by only 2.6 percent. Total revenue growth from the newspaper industry grew by 6.7 percent and by 50 percent in the Asia-Pacific region and in China, respectively (Table 14).

Global newspaper market value: 2010 - 2014 billion \$											
	2010	2011	2011 vs 2010 (%)	2012	2012 vs 2011 (%)	2013	2013 vs 2012 (%)	2014	2014 vs 2013 (%)	Av. Points (%)	2014 vs 2010 (%)
Global	124,2	122,9	-1,0	119,3	-2,9	116,4	-2,4	113,9	-2,1	-2,1	-8,3
Europa	47,4	46,5	-1,9	44,2	-4,9	42,2	-4,5	40,5	-4,0	-3,8	-14,6
Asia-Pacific	33,0	34,4	4,2	34,5	0,3	34,8	0,9	35,2	1,1	1,6	6,7
USA	35,9	33,9	-5,6	32,8	-3,2	31,6	-3,7	30,3	-4,1	-4,1	-15,6
China	6,0	7,4	23,3	7,7	4,1	8,3	7,8	9,0	8,3	10,9	50,0
Germany	11,2	11,2	0,0	10,8	-3,6	10,4	-3,7	9,7	-6,7	-3,5	-13,4
Japan	15,4	15,2	-1,3	15,1	-0,7	14,9	-1,3	15,0	0,7	-0,7	-2,6
Uk	35,9	33,9	-5,6	32,8	-3,2	31,6	-3,7	30,3	-4,1	-4,1	-15,6

**Table 14. Global newspaper market value: 2010 - 2014 billion \$**

Source: Bussines Source Complete (own illustration)

By analysing figures with regard to changes in revenue from year to year, a trend emerges of increasingly lower revenues in the largest traditional newspaper markets, with the only exception being Japan. This trend is present in the United States, Germany, and the UK. Although this global trend of declining revenues in the newspaper industry slowed in 2014, this

figure is misleading, because it includes China, which during the same period saw an increase in revenue. What is interesting to focus on in the study is the trend of the Asian and Pacific markets. The total growth in Asian markets during the observed period was 6.7 percent, but if one studies the trend from year to year, a slow decline in revenue growth is apparent. The highest revenue growth was achieved in 2011 compared to 2010 and was 4.2 percentage points. After this period, the revenue growth was still positive, but it never recorded such a large increase in revenues from one year to the next. In the coming years, after China reaches saturation and its peak revenue in the newspaper industry, we can expect Asian and Pacific markets to exhibit the same negative trends in the growth of the newspaper industry as the rest of the world.

## 8. FALL OF CIRCULATION WITH AN INCREASE IN THE NEWSPAPER INDUSTRIAL PRODUCTION VOLUME

Table 14 shows that circulation fell by 2.1 percentage points per year, globally. That makes a total of 8.3 percent in the last five years. This decline would have been much higher if the analysis excluded China, which increased circulation in the observed period by 50 percent. This analysis of falling circulation numbers shows that the printing part of the publishing industry has already moved to its mature phase.

Global newspaper market volume:

2010 - 2014 million units

2010	522,3	-
2011	533,3	2,1%
2012	535,2	0,4%
2013	545,6	1,9%
2014	549,4	0,7%

**Table 15. Global newspapers market volume: 2010 – 2014.**

Source: Bussines Source Complete (own illustration)

This claim is supported by data on declining circulation numbers and increases in print production volume (Table 15). Print production volume grew at an average rate of 1.3 percentage points from year to year and total growth in the observed period was 5.2 percent. However, if we analyse the movement of print production volume year after year, we see that the volume varies and there is no longer a steady upward trend. Already in 2012, production volume decreased in comparison to 2011, and the same trend is shown in the last reference period when the volume of production in 2014 fell compared to 2013. These trends in the newspaper market point to two main observations: 1) the unstable trend in volume indicates market saturation and constant innovations in selling and distribution of printed materials, with an increase in number of printed pages and 2) increasing the volume of production increases costs, reduces profitability, and circulation continues to fall, leading to increased sector concentration, with competitors gradually leaving individual segments of production and moving their capital to new forms of publication. In the case of the newspaper industry, digitization has allowed the distribution of content on different platforms, which points to the use of smartphones, tablets and other electronic gadgets as the future of the newspaper industry.

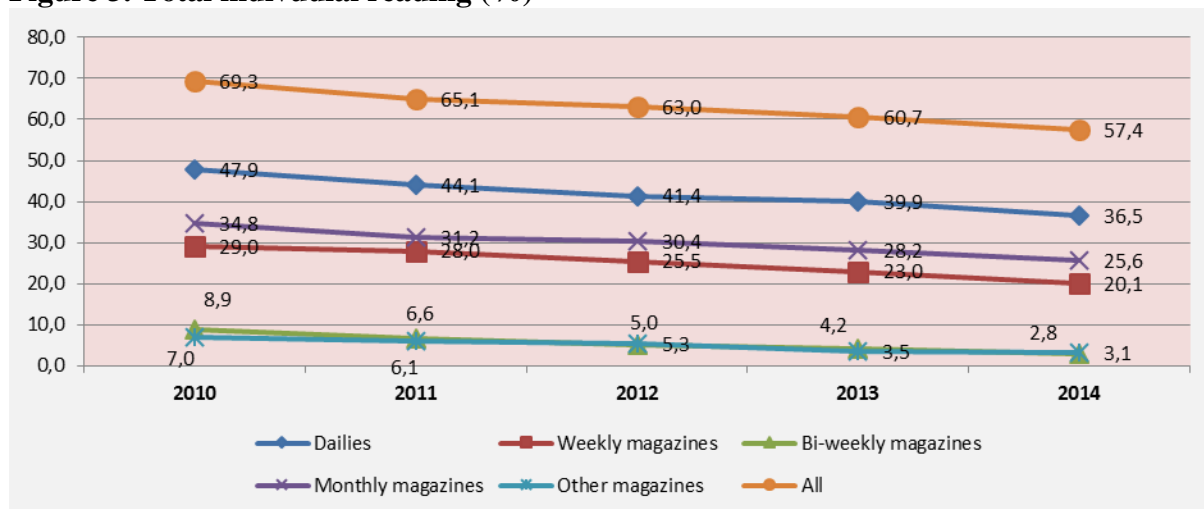
## 9. NEWSPAPER INDUSTRY IN THE REPUBLIC OF CROATIA

Global trends in the publishing industry, especially the negative trends in the newspaper industry, can also be confirmed in the publishing market in the Republic of Croatia. The global financial crisis, which engulfed first the US, and then Europe, had huge consequences on



Croatia's economic situation and caused a drop in its GDP. Only in 2015 did the economy of Croatia start to slowly recover from the crisis and emerge from the recession. According to the Central Bureau of Statistics of the Republic of Croatia, a positive economic growth rate of 0.2 percent was finally recorded in the fourth quarter of 2014. Within the trend of negative growth that has been ongoing since 2008, this was the first time since 2011 that positive growth had been achieved.

**Figure 3. Total individual reading (%)**



Source: Ipsos Puls (own illustration)

The economic crisis and subsequent recession affected all industries in the Republic of Croatia, and it hit mature industries such as the newspaper industry especially hard. The economic crisis led to a fall in employment and standard of living, which has resulted in significant social change. According to the results of the research agency Ipsos Puls shown in Figure 3, all types of newspaper editions recorded a decline in readership over this period.

Average reading (%)			
	2010	2014	2014-2010
Dailies	47,9	36,5	-23,8%
Weekly magazines	29	20,1	-30,7%
Bi-weekly magazines	8,9	2,8	-68,5%
Monthly magazines	34,8	25,6	-26,4%
Other magazines	7	3,1	-55,7%
All	69,3	57,4	-17,2%

**Table 16. Global newspapers market volume: 2010 – 2014.**

Source: Ipsos Puls (own illustration)

According to the data in Table 16, average readership for all publications decreased by 17.2 percent in the period from 2010 to 2014. The largest decline in number of readers has been for biweekly publications, with a fall in readership of 68.5 percent; the smallest decline of 23.8 percent was seen in daily press. Weekly and monthly publications saw drops in readership of 30.7 and 26.4 percent, respectively. The trend of falling readership of print editions followed global trends, but it has been noted that the economic crisis has brought about long-term shifts

in readership numbers, which are reflected in the continued decline in the number of readers from year to year.

The decline in sales of newspapers has occurred at an even greater rate than the decline in readership. Data on the decline in sales, according to the number of copies sold, is shown in Table 17. While the decline in readership in the observed period was 17.2 percent, the overall decline in sales was double, and amounted to a 35.3 percent drop in the observed period. Comparing the results of the global drop in revenues of 8 percent with the decrease in sales in the Republic of Croatia of 28.5 percent, the decline in sales in the Republic of Croatia was more than three times the global downturn of the newspaper industry. From the analysis of results and a comparison of the global and national market, it is evident that the global economic crisis has left a deep mark on the Croatian economy, and especially its newspaper industry.

	Average sale (%)		
	2010	2014	2014-2010
Dailies	405.510	289.881	-28,5%
Weekly magazines	239.731	117.094	-51,2%
Bi-weekly magazines	31.474	31.772	0,9%
Monthly magazines	269.525	176.181	-34,6%
Other magazines	70.318	42.707	-39,3%
All	1.016.558	657.635	-35,3%

**Table 17. Global newspapers market volume: 2010 – 2014.**

Source: Ipsos Puls (own illustration)

By comparing only the data on readership and sales from Tables 14 and 15, it is evident how the drop in readership follows an even larger drop in sales. The sale of dailies fell by five per cent—more than the number of readers—and weeklies have fallen by as much as 20 percent. These two segments of the newspaper market are a predominant part of overall news production in terms of the quantity of content produced and printed editions. Other print publications follow similar trends, except the segment of biweeklies, in which two new magazines appeared in the period of analysis, which makes it impossible to correlate this segment with other media segments. From the above, we can conclude that the Croatian news industry is shaken by deep crisis and that the downward trend is not moderating.

## 10. OPEN DISCUSSION QUESTIONS

The aim of this paper is to determine the different directions, speed and publishing industry development trends in different geographic areas. From the analysed data it is evident that the publishing industry on a global scale is heterogeneous and that the direction of development, speed and different trends are susceptible to the influence of various exogenous variables.

The first hypothesis: the publishing industry, as a Modernist industry, experienced negative development trends in geographical areas that entered into a period of post-modernism first, can be accepted with a supplement of interpretation. From the data shown in Table 2, it is evident that publishing industry revenues are falling globally at an average rate of 0.4 percent per annum, or by 1.4 percent in the observed period of five years. The biggest drop in revenues of 8 percent is seen in the newspaper industry, followed by a decline in revenues in the magazine industry by 3.1 percent. The supplement to interpretation refers to revenue from book sales within the publishing industry. Although the total revenues of the publishing industry fell,

revenues from book sales grew, but not enough to soften the overall revenue decline. The question remains for future research as to what variables affected sales and the distribution of income within the publishing industry. It is apparent that the revenues from newspapers as a primary news media fall, and also revenues from magazines as a medium that is associated with leisure and everything connected with time out of work commitments. At the same time, revenue from the sale of books continues to grow. Topics for future research could focus on the study of the book sales segment which is of primary importance for the growth of revenue. The study could identify which segments of the book market are driving growth, whether it is professional, scientific, popular or any other book segment.

According to geographical segmentation, the publishing industry witnessed significant changes. By comparing different geographical areas, we can prove the hypothesis that the publishing industry recorded total revenue decline in the United States and Europe, which are geographic areas that have gone through a period of Modernism and early development of capitalism. In these geographic areas, social relations recently underwent transformations towards a post-modern society, and their economic practices can be recognized as belonging to a post-industrial era. This may also encompass Japan, although it did not go through a lengthy period of modernism, and it was only after the Second World War that it began to develop a modern industrial production. In contrast to the US, Europe and Japan, China which is rapidly building industrial production capacity and becoming urbanized, registers an extremely high growth in publishing. Total growth for the past five years is 46.2 percent. In addition, revenues from the newspaper industry in China grew by 50 percent, in contrast to all other analyzed geographic areas and countries, all of which recorded negative trends in the newspaper industry.

The second hypothesis – the Croatian media industry showed the same trends of falling circulation as the media-developed countries – can be fully accepted. When we study the direction, speed, and trends in the global newspaper market, and compare them to the results of research on the domestic newspaper market, we note that the Croatian newspaper industry follows the global trends. In addition, it should be mentioned that the rate of decline of revenues in the Croatian newspaper industry was higher than the global rate. When comparing the total publishing industry in Croatia and globally, we notice a difference between the two because on a global level magazines are falling more slowly than newspapers, but in the domestic market this trend is reversed. While daily newspapers in Croatia recorded a revenue drop of 28.5 percent, the decline in revenues from the weeklies was 51.2 percent.

From the analysed data it is evident that the publishing industry in Croatia is going through a period of deep crisis. Future research will show how many participants of the publishing industry will survive the crisis and whether there will be structural changes in the way business processes are managed.

## LITERATURA

1. Bagdikian, H.B. (2000) *The media monopoly*, Sixt Edition, Boston, Beacon Press Books
2. Blanchard, A.M., ed. (2013) *History of Mass Media in the United States: An Encyclopedia*, Routledge, Taylor & Frances Group
3. Disher, W. (2014) *Crash Course in Collection Development*, Second Edition, Libraries Unlimited
4. Doyle, G. (2013) *Understanding Media Economies*, Second Edition, Sage
5. Greco, N.A. (2015) *The Economics of Publishing and the Information Industry – The search for Yield in a Disintermediated World*, New York, Routledge
6. Kosut, M., (2012) *Encyclopedia of Gender in media*, Sage Publication
7. Kung, L. (2013) *Strategic management in the Media: theory and practice*, Sage Publications, Ltd.

8. Law, A. (2013) *Implosion, What Internet has REALLY Done to Culture and Communication*, London, LID Publishing Ltd.
9. Picard, G. R. (2011) *The Economics and Financing of Media Companies*, Second Edition, New York, Fordham University Press
10. Picard, G.R. (1989) *Media Economics: Concept and Issues (Commtext Series)*, Sage Publication, Ltd.
11. Straubhaar, J.; LaRose, R.; Davenport, L. (2014) *Media now: Understanding Media, Culture and Technology*, Ninth Edition, Cengage Learning
12. Wirtz, W.B. (2011) *Media and Internet Management*, 1th Edition, Gabler Verlag, Springer Fachmedien Wiesbaden GmbH

## THE ORCHESTRATION OF WEB-BASED SALES PROCESSES – A CASE STUDY

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### **ABSTRACT**

*Contemporary businesses are performing their sales processes widely using Web-based information systems support like web shops. This raises many questions like security issues, legal conformity, integration and other issues, while insuring the demanded operational performance level. This paper addresses the orchestration of Sales processes and its impact on architectural construction of information systems in order to meet the requirements of modern selling in businesses.*

**Keywords:** *Web Shop, e-Business, Process Orchestration*

### **1. INTRODUCTION**

In order to meet customer demands which include mobile 24/7 availability of services, businesses use contemporary technologies for performing their processes including Web-based technologies and mobile systems. Many researchers advocate this communication paradigm, emphasizing that in order to gather information from supply chain management (SCM) processes data must be collected, measured, analyzed and continuously monitored meaning that this “requires integration of data coming out of ERP (Enterprise Resource Planning), SCM and all other systems supporting these business processes” [Stefanović, Stefanović, 2011]. Others stated that “taking part in an enterprise network, including Supply chain management, logistics systems and virtual enterprises, is the core strategy for quickly developing companies” [Li et.al., 2015]. Other researchers identified the lack of the strong commitment to using BPM and BI for supporting performance management in a sense that customer integration is a basic element of services since the customer has an active role in the value creation process [Bosilj Vukšić et.al., 2013]. This raises many issues dealing with legal and top security conformity, integration and other issues, while meeting demanded operational performance level. This is particularly evident in the sales process, as this is a group of profit-active activities.

### **2. WEB-BASED SALES PROCESS' ACTORS AND ACTIVITIES**

According to [Dumas et.al., 2008] “four services are involved in this choreography: customer, sales, warehouse and finance. Each activity denotes an interaction between two services. Importantly, a choreography only shows interactions, as opposed to actions performed internally by a service. In contrast, an orchestration describes the interactions between a designated service (the orchestrator) and a plurality of subordinated services.”

For showing the main communication data objects and flows, we will model a simple version of web-based sales process. In this example, Sales processes are gathering two main actors: The



The orchestration of Sales processes shown in Figure 2 can impact the architectural design as well as the construction of an information system whose role is to insure that proper ICT support is implemented in order meet the requirements of modern selling in businesses.

### **3. PROCESS ORCHESTRATION AND ITS IMPACT ON IS ARCHITECTURE**

Customer i.e. the buyer of goods who is buying on web shops should get the impression of a single communicating point with the Seller. His perception of one integrated system influences his confidence and readiness to shop online, as shown by Gwo-Guang Lee, Hsiu-Fen Lin, [Lee and Lin 2005] whose research showed that the dimensions of web site design, reliability, responsiveness, and trust affect overall service quality and customer satisfaction and that the latter in turn are significantly related to customer purchase intentions. If this customer oriented demand is translated into business requirements, this means that Sales processes must appear to the customer as performed in a one integrated system. Practically, the company's information system can be physically realized with in-house and rental services, components and equipment but logically it should appear to the customers as a one fully integrated system with indifference of physical elements.

According to Pinto [Pinto et.al., 2012] "Service orchestrations live in a very unstable world in which changes occur continuously and unpredictably. External services invoked by the orchestration may be discontinued by their providers, they may fail, or they may become unreachable or incompatible with the original versions. Furthermore, the orchestration requirements may evolve due to business needs. It is therefore fundamental that orchestration languages and their run-time systems provide ways to support dynamic evolution, allowing orchestration models or even currently running instances to be modified to cope with unforeseen situations and changes in requirements." Our implemented process oriented application of the orchestration of Sales processes shown in model in Figure 2 indicated the problem and the need of escalation management and cancellation – abolition. An example of this issue is escalation management dealing with abolition of quantities which are reserved for Web shop in real time, and putting them back in the available stock of the company's operating warehouses management system in case of a prompt appearance of the customer order. The solution of this issue demands new services within the company's enterprise resource planning system, but also within the process model of the sales process supported by POA and orchestrated (Figure 3).

The operation of forming daily stock web shop is derived from an original algorithm, which elaborated by the authors of this work and which has been tested on a real system orchestrated web sales. Fundamental aspects of this algorithm are the following: 1) The system of daily bookings quantity of goods for web shop can be turned on 1 to N operational storage (S) companies, which are integrated into a single central database information system of the company, but can be spatially dislocated via mirroring databases; 2) Percentage (P) of the available quantities in stock at the warehouses (S) which is reserved for the daily supply of web shop, is defined by the hierarchical model, the importance of items, which define three levels of importance of items (IoI). The importance of items from a group of items is determined according to relevant aspects. Identification of the importance of the item, on which the percentage (P) of the available amount in operational storage (S) which is a day reserved for automatic web shop, is a dynamic category that automated algorithm controls updated once every 24 hours. In case of an escalation event, this normally ran procedure needs to be continued, but in addition another procedure must be activated – the procedure of retaining availability and restoring e-stock for the company's WEB shop. The possibility of running these

procedures automatically by controlling relevant variables (S, IoI, P) in real time, shows the significance of the service orchestration in the sales process while retaining stability of offers and flexibility of handling stocks.

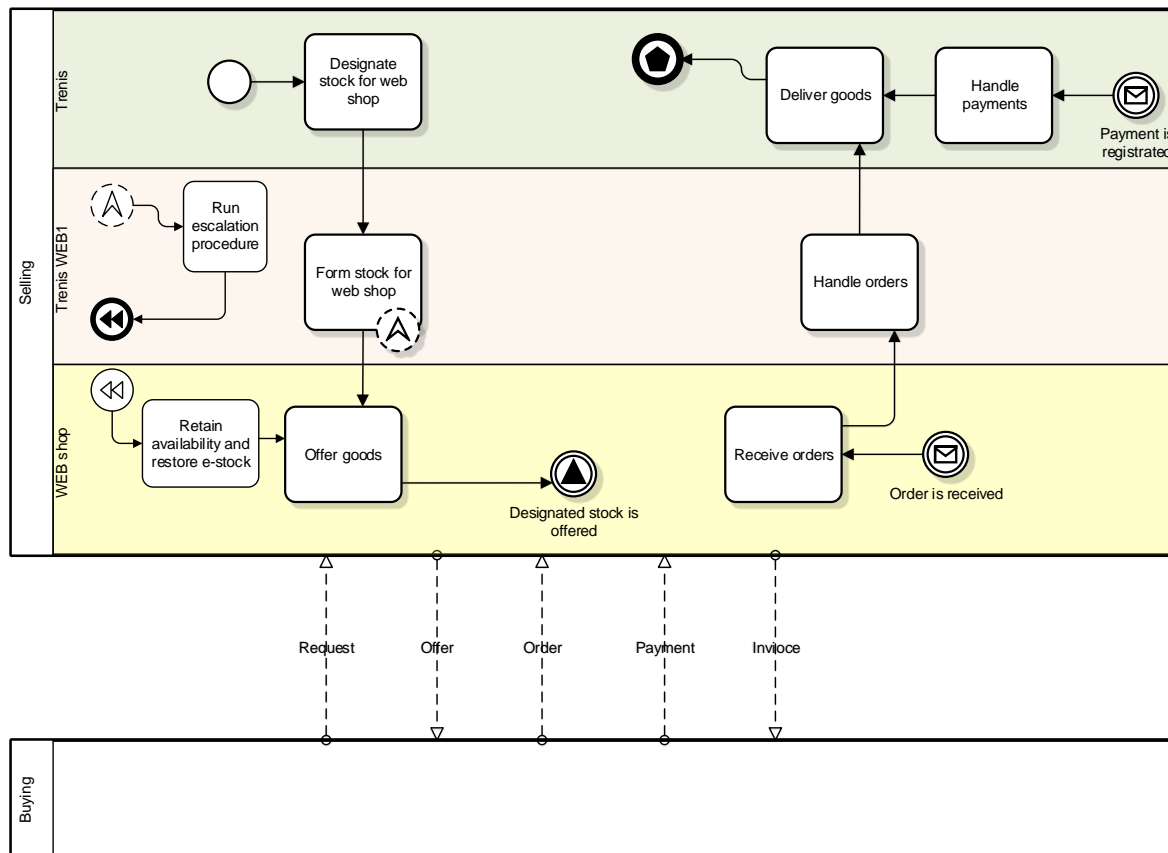


Figure 3. Web-based Sales processes – Managing escalation and compensation issues

Figure 3 show that the process is widened by new activities which are in the sense of information technologies – new application procedure, ran in the back-office. The escalation activity is identified in the activity of forming stock for the web shop, which is ran 24/7. This inventory is the basis of the model orchestrated process system web shop because it provides physical independence of the process in relation to the standard sales process within the business enterprise system [Vidačić, Brumec, 2008].

According to Chen et.al. [2008] “an enterprise architecture (EA) should be organized in a way that supports reasoning about the structure, properties and behavior of the system. It defines the components that make up the overall system and provides a blueprint from which the system can be developed.” As this is a critical demand on modern information systems it is clearly important that a technical indifference in connecting external and internal infrastructure components of the information system must be implemented.

#### 4. CASE STUDY FINDINGS

A cases study is performed on a Croatian Commercial company selling electronically goods. The organization is following the trends of development of e-Business in a way that ICT related project of introducing a retail trade channel realized through the web shop (Web Shop) was defined and executed. Several operational issues arisen during the project so we point out some of them to illustrate the scope of requirements that may occur in real environments.



First issue is dealing with legal conformity in cases when goods ordered via web shops are supposed to be delivered by mail or other means of delivery. Since web shops mainly offer payments by credit card, and that these payment undergo in the legal definition of fiscalization in Croatia as a cash payment, such payments for goods sold in the online store make the process issuing invoices extremely complex.

The second issue is the complex and demanding integration of web-based sales in real-time and within an geographically distributed business, which allows geographically distributed order receiving, geographically distributed warehouse management and geographically distributed goods allocation and delivery.

The third issue is one of a pure technical nature dealing with the establishment of a reliable Web shop and an according goods-management system that runs on information infrastructure in a way that the customer/buyer gets the impression of one integrated system, which is in the background realized with in-house and rental services and equipment.

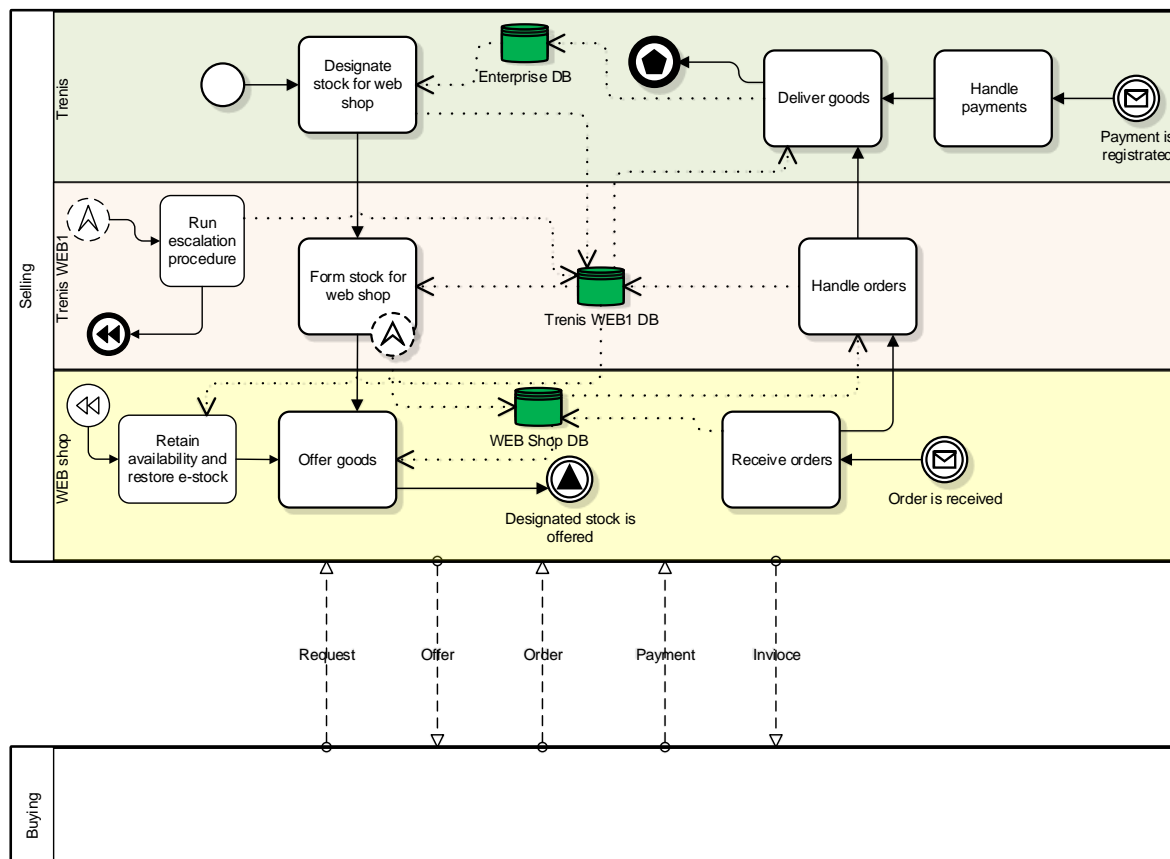


Figure 4. Web-based Sales processes with data components

When we take the model shown in picture 2 (containing a detailed view of the web-based Sales process) and insert data components and their data flows we get model shown in Figure 4. This model shows same basic activities in the Selling pool, which are interconnected by sequence flows, data flows and data stores, and have the same important events that take part in running processes. The data store 'TRENIS' represents the main database used in company's Enterprise Resource Planning (ERP) System, data store 'TRENIS\_WEB1' stands for a temporary database which is with its applications used for orchestrating the Sales process and the data store

'WebShop DB' which contains the operational web-collected data on offers, incoming orders, and payments. The orchestrating data store 'TRENIS\_WEB1' runs 24/7 in real-time and with 15 minutes refresh rate on the incoming side from the web shop and is the main integration instrument in this case study.

## 5. CONSLUSION

There are various scenarios of implementing Web-based Sales processes. Scenario in which a website is used as a selling channel in a geographically distributed business that take place in real-time within the enterprise information system are not simple. Certain business requirements must be met as well as the following important issues should be resolved: the satisfaction of the customer, guaranteed supply and shipment of ordered and paid goods over the Web, the technical indifference in connecting external and internal infrastructure components of the information system, single centralized monitoring and management of web sales in the company's ERP, information system security and stability. In this paper, one of the possible, implemented and tested model of the above scenarios is addressed.

## LITERATURE

1. Dumas, M., Benatallah, B., Motahari Nezhad, H.R. (2008). Web Service Protocols: Compatibility and Adaptation. *IEEE Data Eng. Bull.* Vol 31(3). (p. 40-44).
2. Lee, G.G., Lin, H.F. (2005). Customer perceptions of e-service quality in online shopping. *International Journal of Retail & Distribution Management.* Vol 33(2). (p. 161 – 176).
3. Pinto, L.S., Cugola, G., Ghezzi, C. (2012). Dealing with changes in service orchestrations. In *Proceedings of the 27th Annual ACM Symposium on Applied Computing* (SAC '12). ACM: New York. (p. 1961-1967).
4. Vidačić, S., Brumec, S. (2008). Hybrid Model of the Mobile Information System in a Complex Warehouse System, In *Proceedings of the 19h International Conference of Information and Intelligent Systems – CECIS 2008*, Varaždin. ( p.333-339).
5. Stefanović, N., Stefanović, D. (2011). Supply chain performance measurement system based on scorecards and web portals. *Computer Science and Information Systems.* Vol 8(1). (p. 167-192).
6. Chen, D., Doumeingts, G., Vernadat, F. (2008). Architectures for enterprise integration and interoperability: Past, present and future. *Computers in Industry.* Vol 59. (p. 647-659).
7. Bosilj Vukšić, V., Pejić Bach, M., Popović, A. (2013). Supporting performance management with business process management and business intelligence: A case analysis of integration and orchestration. *International Journal of Information Management.* Vol 33(4) (p. 613-619).
8. Li, Q., Wang, Z., Cao, Z., Du, R., Luo, H. (2015). Process and data fragmentation-oriented enterprise network integration with collaboration modelling and collaboration agents. *Enterprise Information Systems.* Vol 9(5-6). (p. 468-498).

## SHORT TERM VALUE CREATION FOR THE BIDDER – EVIDENCE FROM FINLAND

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### **ABSTRACT**

*In this paper we investigate the short term abnormal return to the bidding firm's shareholders in takeover transactions in Finland during the time period from January 2000 to December 2013. Specific features of the market for corporate acquisitions in Finland are that almost all of the transactions are friendly acquisitions and usually aim for 100 % of the target company. We estimate the abnormal return around 314 individual takeover announcements and investigate determinants of the abnormal returns. Our results show that the takeover announcement on average yields a positive abnormal return to the bidding firm's shareholders, thus, support the value creating hypothesis. The announcement effect on the announcement day is 1.4 % and statistically significant. Both pre-event and post-event abnormal returns are statistically insignificant, although there is sign of a negative revaluation in the post-event period. Among the takeover characteristics, we document a significant impact on the bidder's abnormal return on the announcement day for small deals yielding a higher abnormal return, but a positive relationship between the announcement effect and the relative size of the deal, cross-border deals giving a smaller abnormal return, and diversification deals giving a higher abnormal return to the bidder's shareholders.*

**Keywords:** *Event study, takeover, value creation*

### **1. INTRODUCTION**

Corporate acquisition is a fast way for a company to grow compared to organic growth. Most bidding companies motivate this way to grow by the potential synergies that the acquisition creates, hence, one should expect the acquisition not only to create growth but also to create value for the acquiring firm's shareholders. However, empirical evidence from the takeover market report that bidding firm's shareholders at most earn small and/or insignificant returns, while target firm's shareholders earn large and significant returns in takeover transactions.<sup>41</sup> The returns are heavily skewed in favor of the target firm also after adjusting for differences in firm size. Bradley, Desai & Kim (1988) reported a 90/10 split of the value-weighted takeover gain in their US sample, while Högfeldt & Högholm (2000) observed a similar distribution in a sample of Swedish takeovers.

Three major takeover motives have been advanced in the literature implying gains for both the bidder and the target, or negative return to the bidder. These are the synergy motive, the agency motive and the hubris hypothesis.

The *synergy motive* assumes that managers maximize shareholders' wealth and would engage in takeover activities only if it results in gains to the shareholders. Among the synergy motives, one set of motives is consistent with the assumption that additional value is created by

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<sup>41</sup> For an overview of the wealth effects of takeover transactions, see, e.g., Jensen & Ruback, 1983, Jarrell, Brickley & Netter, 1988, Agrawal & Jaffe, 2000, Bruner, 2004, and Martynova & Renneboog, 2008a.

takeovers.<sup>42</sup> The second set of motives cast doubt on whether any additional value is created by takeovers, or if the resulting gains to shareholders' is at the expense of other stakeholders (e.g., employees, customers, suppliers, tax payers).<sup>43</sup>

According to the synergy motives, there should always be a positive gain in takeovers for all shareholders, stemming from efficiency improvements or from other stakeholders. Therefore, it follows that the measured gain to both target and bidder shareholders is expected to be positive. The division of the gain between target firm and acquiring firm shareholders may, though, not be equally distributed, but may be skewed in favor of the target due to a number of reasons.<sup>44</sup>

According to the *agency theory* (Jensen & Meckling, 1976, Jensen, 1986) it has been suggested that some takeovers are primarily motivated by the self-interest of the acquirer management. Several reasons have been advanced to explain this divergence.<sup>45</sup> The basic idea in most of these explanations is that acquisitions result in an extraction of value from the acquirer shareholders by acquirer management.

The important aspect of the above argument is that the target firm has been identified by the acquirer management as one that is most suited to increase its own welfare. Therefore, target shareholders, realizing their value to the acquirer management, will attempt to obtain some of this value. To the extent that target shareholders have some bargaining power, they will succeed in doing so, and the value they obtain will increase with the amount that the acquirer management can appropriate. Therefore, the more severe the agency problem, the higher is the target's gain. Since greater appropriation by acquirer management also results in lower (or a negative) total gain, the observed gain to acquirer shareholder's should be small (compared to target shareholder's gain) or negative.

Roll (1986) hypothesizes that managers commit errors of over optimism in evaluating takeover opportunities due to excessive *pride or hubris*. Hence, the takeover premium is a random error, a mistake by the bidder. The hubris hypothesis assumes market efficiency. Stock prices reflect all information; redeployment of productive resources cannot bring gains, and management cannot be improved through reshuffling or combinations across firms. Roll (1986) claims that the hubris hypothesis thus serves as a benchmark for comparison and is the null hypothesis against which other hypotheses should be compared. Further, the hypothesis does not require conscious pursuit of self-interest by managers. Managers may have good intentions, but can make mistakes in judgment.

Since the takeover gain, according to the hubris hypothesis, is presumed to be close to zero, the payment to target shareholders represents a transfer between the target and the acquirer. It follows that the higher the target gain, the lower the bidder gain, and that the total gain is close to zero (e.g., Berkovitch & Narayanan, 1993, Malmendier & Tate, 2005).

The purpose of this study is to investigate the short term abnormal return to the bidding firm's shareholders in takeover transactions in Finland during the time period from January 2000 to

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<sup>42</sup> E.g., the inefficient management motive (e.g., Bradley, Desai & Kim, 1988), the financial synergy motive (e.g., Prescott & Visscher, 1980), strategic alignment to changing environments (e.g., Summer, 1980), the undervaluation theory (e.g., Chappell & Cheng, 1984), the information hypothesis (e.g., Bradley, Desai & Kim, 1988)

<sup>43</sup> E.g., the market power hypothesis (e.g., Eckbo, 1992), the tax motive (e.g., Auerbach & Reishaus, 1987), increased financial risk (e.g., Dennis & McConnell, 1986), employees deprived from their benefits (e.g., Shleifer & Summers, 1988)

<sup>44</sup> E.g., free riding (Grossman & Hart, 1980), bidder competition (e.g., Fishman, 1988), takeover defense measures (e.g., Harris, 1990), bargaining power (e.g., Högfeldt & Högholm, 2000)

<sup>45</sup> E.g., diversification of management's personal portfolio (Amihud & Lev, 1981), increasing the size of the firm (Jensen, 1986), and acquiring assets that increase the firm's dependance on the management (Shleifer & Vishny, 1989)

December 2013. Due to the small number of publicly listed companies in Finland there are only a small number of transactions involving two publicly traded companies. Hence, in this study we also consider acquisitions involving privately held target companies. To our knowledge there are very few studies focusing on the Finnish takeover market, and none studying the market during the last 15 years. Specific features of the market for corporate acquisitions in Finland are that almost all of the transactions are friendly acquisitions and usually aim for 100 % of the target company. We estimate the abnormal return around 314 individual takeover announcements and investigate determinants of the abnormal returns. Our results show that the takeover announcement on average yields a positive abnormal return to the bidding firm's shareholders, thus, supporting the value-creating hypothesis. The announcement effect on the announcement day is 1.4 % and statistically significant. Both pre-event and post-event abnormal returns are statistically insignificant, although there is sign of a negative revaluation in the post-event period. Among the takeover characteristics, we document a significant negative relationship between the bidder's abnormal return on the announcement day and the size of the deal, but a positive relationship between the announcement effect and the relative size of the deal. Cross-border deals yield a smaller abnormal return than domestic deals, while diversification deals give a higher abnormal return to the bidder's shareholders.

The remainder of the paper is organized as follows. In Section 2 we summarize the literature review on the determinants of the share price reaction to the takeover announcement. Section 3 describes the methodology and the data, while the empirical results are presented in Section 4. Section 5 concludes the study.

## 2. THE VALUE CREATION FOR BIDDERS AND ITS DETERMINANTS

All the presented motives for takeovers suggest that target shareholders experience a short term gain in takeover transactions. On the basis of the presented motives, however, the effect for the acquirer firm's shareholders is not clear. This is also evident in the presented empirical results across different stock markets, where some find positive, some negative, and some insignificant bidder returns. The takeover literature has also shown that the characteristics of the deal will affect takeover returns, and, hence, the gain to the shareholders.<sup>46</sup>

Kane (2000) and Moeller, Schlingemann & Stulz (2004) argue that large transactions result in value creation for the shareholders. On the other hand, e.g., Al-Sharkas (2003) shows a negative correlation between bidder abnormal return and relative size. Likewise, Bradley & Sundaram (2004) show that the announcement effect is more negative with increased target size. As argued by Hansen (1987), a possible revaluation loss will be larger for the bidder the larger the target company. In this paper we are not only interested in the size of the target per se, but instead in the size of the deal and the relative size of the deal to the value of the bidder. There are contrasted results regarding the *size effect*, but we expect to find a negative relationship between the size of the deal and the abnormal return to the bidder on the announcement day.

*Cross-border takeovers* may open up an opportunity for the bidder to exploit market imperfections and to expand their business into new, international markets (e.g., Moeller & Schlingemann, 2005). Since these effects are unavailable in domestic takeovers, one may expect a higher wealth effect in cross-border deals. Martynova & Renneboog (2008b) argue that takeover gains may be caused by improvements in governance of the bidder and the target firm. However, if there are large institutional differences in the bidder's and the target's countries, there may also be difficulties in the post-takeover process to utilize the perceived synergies. If the market anticipates such difficulties it may discount the expected gain. Conn, Cosh, Geust & Hughes (2005) and Moeller & Schlingemann (2005) present evidence consistent

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<sup>46</sup> For an overview of the empirical evidence, see, e.g., Jensen & Ruback, 1983, Agrawal and Jaffe, 2000, Bruner, 2004, Martynova & Renneboog, 2008a.

with this hypothesis. Mixed results are documented with respect to cross-border acquisitions. However, we expect to find a more positive announcement effect to a cross-border deal. Moeller & Schlingemann (2005) also find a larger positive bidder return if the target is originated in a country with a legal environment offering good shareholder protection. Hence, we also expect a larger positive bidder return for transactions where the target firm is from the US or the UK. *Conglomerate takeovers (diversification)* may create operational and financial synergies, which may lower the financial risk, and, hence, the probability that the company goes bankrupt. This may also lower the cost of debt for the company (Agrawal, Jaffe & Mandelker, 1992). Diversification is also associated with a number of disadvantages stemming from the agency problem between managers and shareholders (e.g., Doukas, Holmen & Travos, 2002, Schafstein & Stein, 2000), which may lead to lower takeover returns to bidders engaging in conglomerate takeovers. Mixed results have been documented for the value creation to the bidder's shareholders in conglomerate acquisitions. We expect, however, a more positive announcement response to a focused takeover compared to an announcement of a conglomerate takeover.

The *legal status* of the target company may also affect the takeover gain. A takeover involving a privately held target company may result in a higher return to the bidder's shareholders than a corresponding transaction involving a publicly traded target company (e.g., Moeller, Schlingemann & Stulz, 2004, Faccio, McConnell & Stolin, 2006). One reason can be a required illiquidity premium, another that the bidder may have a better negotiation power buying a private company compared to launching a public tender offer. Also the probability of the bid to succeed is higher in a private transaction. However, buying a private firm can also be considered being more risky, since there is less information available about the target firm. We expect a more positive announcement effect in a takeover transaction involving a privately held target company.

Martynova & Renneboog (2009) suggest that the method of payment may affect the short term market reaction to a takeover announcement. All cash bids are expected to generate a higher return to the shareholders than all-equity bids. The explanation is that asymmetric information implies that the bidder uses shares as a mean of payment when the share is overvalued, and uses cash when it is undervalued (Myers & Majluf, 1984). Several studies have confirmed that the market reaction to announcements of equity offerings is significantly negative (e.g., Moeller, Schlingemann & Stulz, 2004, Moeller & Schlingemann, 2005, Martynova & Renneboog, 2011). In line with previous studies we expect a more positive announcement effect when the bid is an all-cash offering.<sup>47</sup>

### 3. METHODOLOGY AND DATA

We study the short term announcement effect to the bidder's shareholders and investigate several factors that may affect the stock market reaction to the takeover announcement. We measure the announcement effect as the sum of the daily average abnormal returns<sup>48</sup> (CAAR) over different windows around the announcement day<sup>49</sup>, with a total event window of 41 days,

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<sup>47</sup> Other proposed takeover characteristics that may affect the short term value creation to the bidder are, e.g., *value vs. growth* (Sudarsanam & Mahate, 2003); *friendly vs. hostile* (Goergen & Renneboog, 2004); *tender offers vs. mergers* (Rau & Vermaelen, 1998); *target ownership structure* (Martynova & Renneboog, 2008a); *bidder toehold* (Stulz, Walking & Song, 1990); *investor protection* (Goergen, Martynova & Renneboog, 2005.); *partial acquisitions* (La Porta, Lopez-de-Silanes, Shleifer & Vishny, 2002); *takeover waves* (Martynova & Renneboog, 2011).

<sup>48</sup> The returns are continuously compounded returns.

<sup>49</sup> The event day (announcement day) is defined as the day when the information of the takeover was announced for the first time (or the day after if the announcement occurred after the closing of the trading day or on a non-trading day).

20 days prior to and 20 days after the event day. We also study alternative event windows before and after the announcement day to capture any effect of a price run-up before the event, or a possible value readjustment after the announcement day. The daily abnormal return (AR) is calculated as the difference between the actual return and the expected return. The expected return is calculated using the market model. We use the value-weighted OMXHelsinki cap<sup>50</sup> as a proxy for the market portfolio. To estimate the parameters in the market model we use a window of 241 days, starting 300 days and ending 60 days prior to the event day.

To further study the market reaction to the takeover announcement, we regress the bidder's short term abnormal return on several explanatory factors with respect to the characteristics of the acquisition. The key characteristics we use are the size and the relative size of the transaction, the origin of the target company, the legal status of the target company, the strategic scope of the transaction (focus or diversification), and the mean of payments.

We study a sample of takeovers made by Finnish stock market listed companies during the time period from January 2000 to December 2013. The information about the acquisition is collected from the Thomson ONE Banker Database and corresponding stock exchange releases. There are a total of 1703 acquisitions during this time period where the bidder is publicly traded. We further restrict the sample to acquisitions where the bidder acquire a majority stake in the target (more than 50% ownership), leaving us with 1108 observations. We also eliminate transactions that may be considered too small to yield an observable stock market reaction to the announcement. We set the transaction value limit to 10 million USD, leaving us with a final sample of 314 transactions.

We collect information about the characteristics of the acquisition from the Thomson ONE Banker database, from stock exchange releases and from companies' homepages. In several acquisitions, when the target firm is privately held, there is a lack of reliable information mostly regarding the term of payments. Some bidders disclose all the details about the bid, but since this is not mandatory for small transactions of privately held targets, there are bidders that do not disclose all details regarding the characteristics of the bid.

#### 4. RESULTS

In this section we first present the deal characteristics and the results from the univariate analysis of the bidder's cumulative average abnormal return (CAAR) in 314 takeover transactions in Finland during the time period from January 2000 to December 2013. Secondly, we analyze the determinants of the abnormal return to the takeover announcement.

Table 1 shows that the announcement of a takeover bid on average yields a statistically significant positive abnormal return to the bidder's shareholders on the announcement day ( $T = 0$ ). Using the market model, the average abnormal return is about 1.4 percent on the event day. For an event window of seven days centered around the announcement day, the cumulative average abnormal return (CAAR) increases to about 2 percent (statistically significant). This result is comparable to the results reported in Martynova & Renneboog (2011) for a sample of Finnish bidders during the time period 1993-2001.

We do not document any evidence of a price run-up in the pre-event period (20 days to 1 day before the announcement). None of the pre-event windows exhibits a significant CAAR. We do, however, see indications of a delayed market reaction to the announcement with a positive CAAR of 0.57 percent in the event window one day to three days after the announcement. For

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<sup>50</sup> We use the restricted version of the market index (OMXHelsinki cap) which restricts the weight of any individual company to a maximum of ten percent in the index. This is due to the large weight of some companies in the unrestricted market index, e.g., the weight of Nokia was about 60 percent in the index in year 2000.

the longer post-event windows the CAARs are not statistically significant, although there seems to be some price reversal in the longest event window, mainly from days 14 to 20.<sup>51</sup>

Overall, the results show that short term bidder returns are positive and statistically significant. The returns accumulate mostly during a seven day event window centered on the event day, with the majority of the market reaction to the bid occurring at the announcement day. Hence, the announcement is on average a value creating event for the bidder's shareholders, indicating that the main motive for the transaction is to create value to the shareholders.<sup>52</sup> However, out of the 314 announcements, only 202 had a positive abnormal return on the announcement day. Hence, we cannot rule out that some of the acquisitions may be driven by hubris or agency motives, since 112 announcements yielded a negative abnormal announcement day return.

Our results are robust to the length of the event window. In the remainder of the paper we report the results on the announcement day and for an event window of seven days centered at the announcement day using the market model returns as the benchmark returns. Using a longer event window does not materially change the results.<sup>53</sup>

Table 1 also reports the market reaction to takeover announcements by characteristics of the deal. The mean transaction value is 237 million USD (median 50 million USD). Both large (above median) and small transactions yield a statistically significant abnormal return on the announcement day as well as during the seven day event window. However, large transactions seem to yield a lower positive announcement reaction than small transactions on the event day (0.83 versus 1.97 percent). The difference is statistically significant (prob-value 0.09). The difference is, however, insignificant between the two groups during the seven day event window.

Most of the bids made by Finnish bidders are for a foreign target company. The relative number of cross-border bids is 63 percent. This is consistent with the number of cross-border bids (60 percent) for a sample of 53 Finnish bidders during the time period 1993-2001 (Martynova & Renneboog, 2011). A total of 38 acquisitions are made in countries with the highest shareholder protection (27 transactions in the US and 11 transactions in the UK). Overall, the bidder experience a positive announcement effect for both cross-border and domestic bids, but the announcement effect is significantly lower for bidders engaging in cross-border transactions (0.80 versus 2.42 percent). The same difference is also found in the seven day event window. Bidders making acquisitions in the US or in the UK have a higher announcement effect, but the difference is statistically insignificant.

Diversification was the dominant takeover strategy for the bidders in our sample. About 63 percent of the bids were for a target company operating in a different industry than the bidder.

*Table 1: Average abnormal (AR) and cumulative average abnormal return (CAAR) for the bidding firm by different characteristics of the acquisition*

The table reports the average abnormal return and the cumulative average abnormal return for the bidding firm in 314 takeover transactions in Finland during the time period Jan 2000-Dec 2013 over a seven day event window and for different characteristics of the acquisition. The abnormal returns are calculated using the market model, where the market return is based on the value-weighted total return index OMX Helsinki cap. The acquisition characteristics are the size of the bid, the origin of the target company (cross-border or domestic), the bid being for a

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<sup>51</sup> The results for different event windows are not reported in the paper, but are available from the authors on request.

<sup>52</sup> In addition, the average abnormal return for the sample of publicly traded target firms was 38.4 percent on the announcement day.

<sup>53</sup> The results for alternative event windows are available upon request.



publicly traded or privately held company, the bid being for a company within the same industry or for an unrelated company (based upon the SIC-code), the terms of payment; cash or equity, and if the bid is for 100 percent of the target or less. Statistical significance is denoted by \*/\*\*/\*\*\*/\*\*\* (10%/5%/1%).

AAR [t=0]				CAAR [-3:3]			
	(%)	(p-value)	Nobs		(%)	(p-value)	Nobs
Whole sample	1.40 %***	0.00	314	Whole sample	2.16 %***	0.00	314
Large transactions	0.83 %**	0.02	157	Large transactions	2.04 %***	0.00	157
Small transactions	1.97 %***	0.00	157	Small transactions	2.28 %***	0.00	157
Difference	-1.14 %*	0.09		Difference	-0.24 %	0.78	
Cross border	0.80 %***	0.01	116	Cross border	1.51 %***	0.00	116
Domestic	2.42 %***	0.00	198	Domestic	3.26 %***	0.00	198
Difference	-1.62 %**	0.02		Difference	-1.75 %**	0.04	
US/UK target	1.74 %**	0.04	38	US/UK target	3.05 %**	0.03	38
Other	1.33 %***	0.00	276	Other	2.02 %***	0.00	276
Difference	0.41 %	0.69		Difference	1.03 %	0.46	
Diversification	1.80 %***	0.00	198	Diversification	2.55 %***	0.00	198
Non-diversification	0.71 %*	0.06	116	Non-diversification	1.49 %**	0.03	116
Difference	1.09 %	0.12		Difference	1.06 %	0.22	
Public target	0.63 %	0.43	51	Public target	0.87 %	0.43	51
Non-public target	1.55 %***	0.00	263	Non-public target	2.41 %***	0.00	263
Difference	-0.92 %	0.32		Difference	-1.54 %	0.18	
Cash only	1.19 %***	0.00	95	Cash only	2.50 %***	0.00	95
Other payments	1.49 %***	0.00	219	Other payments	2.01 %***	0.00	219
Difference	-0.29 %	0.69		Difference	0.49 %	0.59	
Stock only	3.96 %*	0.08	38	Stock only	4.11 %*	0.07	38
Other payments	1.05 %***	0.00	276	Other payments	1.89 %***	0.00	276
Difference	2.91 %***	0.00		Difference	2.22 %***	0.00	
100 % acquired	1.59 %***	0.00	259	100 % acquired	2.27 %***	0.00	259
Less acquired	0.51 %	0.46	55	Less acquired	1.65 %**	0.04	55
Difference	1.08 %	0.23		Difference	0.62 %	0.58	

In contrast to our expectations, the announcement of a diversification takeover yields a higher return than an announcement of a related takeover (1.80 versus 0.71 percent on the event day, 2.55 versus 1.49 percent during the seven day event window). The difference is, however, not significant on conventional significance levels.

The announcement of an acquisition of a privately held target (about 84 percent of the sample) yields a statistically significant abnormal return of 1.55 percent, whereas the announcement of an acquisition of a public target yields a small positive (insignificant) return of 0.63 percent. The same is evident for the seven day event window, i.e., a significant abnormal return in an acquisition of a private target and an insignificant abnormal return in an acquisition of a public target.

The terms of payment are undisclosed in 153 transactions (almost 49 percent). Of the bids for which the payment method is disclosed, the majority is cash bids (30 percent). Of the remaining bids, 38 are all equity bids (12 percent), while 28 bids (9 percent) are a mix of cash and equity. Contrary to our expectations there is no difference in the announcement effect of cash versus non-cash bids, but a statistically significant higher announcement effect for all equity bids versus other bids. The results may, though, be affected by the fact that in almost 49 percent of the bids the terms of payment is not disclosed, hence, there may be quite a large number of acquisitions that are misclassified.

Finally, we also show the difference in the returns for bids aiming at acquiring 100 percent of the target (82 percent of the acquisitions) compared to partial bids. The announcement effect is on average more positive for acquisitions aiming at 100 percent of the target, although the difference is not statistically significant.

The univariate tests show that there is a difference in the market response to an announcement based upon the characteristics of the bid. In Table 2 we report the results from an OLS-regression of the market reaction using the bid characteristics as explanatory variables. We also add a control variable to the regression, capturing the effect of the sixth takeover wave. For example, Jensen (2004) and Moeller et al. (2005) argue that there is a positive correlation between the sentiment on the stock market and takeover activity, and that bidders in times of high stock market valuation tend to bid more aggressively and, hence, increase the bid premium. As a consequence, the gain that accrues to the bidder's shareholders decreases. Alexandridis, Mavrovitis & Travlos (2012) defined the sixth takeover wave as the time period between June 2003 and December 2007. However, in Finland the activity on the takeover market did not increase until the beginning of 2005. The increased activity continued until the end of year 2008. To control for a potential effect of this increased activity, we define the sixth takeover wave as the time period between January 2005 and December 2008, and include a dummy variable taking the value 1 if the takeover is announced during that time period. A total of 126 announcements were recorded during this time period.

In the analysis of the market response on the announcement day we see that most of the results from the regression analysis are consistent with the findings in the univariate analysis. Specifically, we see that there is a significant negative relationship between the bidder's abnormal return and the size of the deal, indicating that the market expects that the bidding firm may face large post-acquisition integration costs which will reduce the takeover synergy (Martynova & Renneboog, 2011). However, looking at the relative size of the deal to the value of the bidder we document a statistically significant positive relationship. Hence, the results suggest that the larger the deal is to the value of the bidder, the more likely it is that the transaction is driven by value creation, and that the bidder's shareholders also capture some part of this gain.

*Table 2 Determinants of the cumulative abnormal return (CAR)*

The table reports the results of the OLS regression of the cumulative abnormal return for the bidders in 314 takeover transactions in Finland during the time period Jan 2000-Dec 2013. *LOG(Transaction value)* is the value of the bid in million USD, *relative deal value* is the relative value of the deal to the value of the bidder, *cross-border* is a dummy variable taking the value 1 when the target company is of foreign origin, *USUK target* is a dummy variable taking the value 1 when the target company is from the US or the UK, *public target* is a dummy variable taking the value 1 when the target company is publicly traded, *diversification* is a dummy variable taking the value 1 when the target operates in a different industry than the bidder according to their industry classification (SIC-code), *acquiring 100 % of shares* is a dummy variable taking the value of 1 if the bidder acquires all shares, *cash only* is a dummy variable taking the value 1 when the acquisition is paid for in cash, *stock only* is a dummy variable taking the value 1 when the acquisition is paid for in stock and *sixth wave* is a dummy variable taking the value 1 if the acquisition takes place during the time period January 2005 to December 2008. All regressions contain White's heteroskedastic-consistent standard errors. Statistical significance is denoted by \*/\*\*/\*\* (10%/5%/1%).

Dependent variable	AR [t=0]		CAR [-3;+3]	
	<i>coeff.</i>	<i>p-value</i>	<i>coeff.</i>	<i>p-value</i>
Intercept	0.010	0.27	0.025*	0.05
LOG(Transaction value)	-0.006***	0.01	-0.005	0.13
Relative deal value	0.035***	0.00	0.031***	0.00
Cross-border	-0.009	0.16	-0.015*	0.06
USUK target	0.015*	0.05	0.023*	0.06
Public target	-0.003	0.70	-0.013	0.28
Diversification	0.008	0.16	0.009	0.24
Acquiring 100 % of shares	0.002	0.80	-0.004	0.65
Cash only	0.002	0.68	0.011	0.19
Stock only	-0.025	0.86	-0.003	0.85
Sixth wave	0.004	0.46	0.001	0.84
F-stat.	18.84***	0.00	8.05***	0.00
Adjusted R <sup>2</sup>	0.363		0.184	
Number of acquisitions	314		314	

Lower bidder announcement returns are observed for cross-border acquisitions relative to domestic acquisitions (significant in the seven day event window). The results are consistent with findings reported in Conn et al. (2005) and in Moeller & Schlingemann (2005), indicating that the bidding firm may have difficulties in the post-takeover process to utilize the perceived synergies. However, if the target company is from the US or the UK we observe a less negative announcement effect.

There are indications of the market perceiving diversification announcements to be good news, rewarding the bid with a higher positive (not significant) abnormal return than a corresponding announcement of a focused acquisition. Hence, the investors consider the positive effect of risk reduction being larger than the negative effect of the agency problem.

There are also some indications of a lower abnormal return when the target company is publicly listed, but the effect is not statistically significant. There is no difference in the announcement effect whether the bidder acquire 100 percent of the target or a smaller amount, or in the terms of payments being used in the deal. The control variable for the sixth takeover wave is also statistically insignificant.

## 5. CONCLUSION

In this study, we analyze the short term market reaction to takeover announcements in a sample of 314 acquisitions made by a stock market listed Finnish company during the time period from January 2000 to December 2013. The acquisitions of Finnish companies during the studied period were characterized by a diversification strategy involving a domestic target company. The acquisition was typically friendly, and aimed for full control of the target company. We document, on average, a significant positive stock market reaction to the announcement. The announcement effect is statistically significant yielding an average abnormal return of 1.4 percent on the announcement day. This result is consistent with the assumption that most of the acquisitions are motivated by synergy. Neither the pre-event nor the post-event abnormal returns are statistically significant, although there is sign of a negative price revaluation in the post-event period.

We also investigate the relationship between the market reaction to the announcement and deal characteristics. We document a significant, negative relationship between deal size and the abnormal return on the announcement day. However, looking at the size of the deal in relation to the size of the bidder we find a reversed relationship, i.e., the larger the relative size of the deal, the more positive the announcement effect. The market reaction is more favorable to an acquisition of a domestic target company, indicating that the market believes that the acquirer may face substantial post-acquisition integration costs in cross-border transactions. If the target company is from the US or from the UK the negative cross-border effect is smaller. We also document that an acquisition motivated by diversification may yield a higher abnormal return to the bidder shareholders than an acquisition of a target firm within the same industry. Hence, the decrease in the financial risk seems to be more important than a potential increase in the agency costs. We do not find any significant relationship between the announcement effect and the legal status of the target, the terms of payment, full acquisition of the target, or the sixth takeover wave.

## LITERATURE

1. Agrawal, A., Jaffe, J. (2000). The post-merger performance puzzle. *Advances in Mergers and Acquisitions* 1, 7-41.
2. Agrawal, A., Jaffe, J., Mandelker, G. (1992). The post-merger performance of acquiring firms: a re-examination of an anomaly. *Journal of Finance* 47, 1605-1621.
3. Alexandridis, G., Mavrovitis, C., Travlos, N. (2012). How have M&As changed? Evidence from the sixth merger wave. *European Journal of Finance* 18, 663-688.
4. Al-Sharkas, A. (2003). Shareholder wealth effect in bank mergers: new evidence during the period 1980-2000. In *2003 Proceedings from AFFI*, Paris.
5. Amihud, Y., Lev, B. (1981). Risk reduction as a managerial motive for conglomerate mergers. *Bell Journal of Economics* 12, 605-617.
6. Auerbach, A., Reishaus, D. (1987). *The effects of taxation on the merger decision*. National Bureau of Economic Research, Working paper.
7. Berkovitch, E., Narayanan, M. (1993). Motives for takeovers: an empirical investigation. *Journal of Financial and Quantitative Analysis* 28, 347-362.

8. Bradley, M., Desai, A., Kim, H.E. (1988). Synergistic gains from corporate acquisitions and their division between the stockholders of target and acquiring firms. *Journal of Financial Economics* 21, 3-40.
9. Bradley, M., Sundaram, A. (2004). Do acquisitions drive performance or does performance drive acquisitions? *SSRN Working paper*.
10. Bruner, R. (2004). Does M&A pay? *Applied Mergers and Acquisitions* 1, 11-15.
11. Chappell, H., Cheng, D. (1984). Firms' acquisition decisions and Tobin's Q ratio. *Journal of Economics and Business* 2, 29-42.
12. Conn, R., Cosh, A., Guest, P., Hughes, A. (2005). The impact on UK acquirers of domestic, cross-border, public and private acquisitions. *Journal of Business Finance and Accounting* 32, 815-870.
13. Dennis, D., McConnell, J. (1986). Corporate mergers and security returns. *Journal of Financial Economics* 16, 143-187.
14. Doukas, J., Holmen, M., Travlos, N. (2002). Diversification, ownership, and control of Swedish corporations. *European Financial Management* 8, 281-314.
15. Eckbo, E. (1992). Mergers and the value of antitrust dererrence. *Journal of Finance* 47, 1005-1029.
16. Faccio, M., McDonnell, J., Stolin, D. (2006). Returns to acquirers of listed and unlisted targets. *Journal of Financial and Quantitative Analysis* 41, 197-220.
17. Fishman, M. (1988). A theory of preemptive takeover bidding. *Rand Journal of Economics* 19, 88-101.
18. Goergen, M., Martynova, M., Renneboog, L. (2005). Corporate governance convergence: evidence from takeover regulation reforms. *Oxford Review of Economic Policy* 21, 243-268.
19. Goergen, M., Renneboog, L. (2004). Shareholders wealth effects of European domestic and cross-border bids. *European Financial Management* 10, 9-45.
20. Grossman, S., Hart, O. (1980). Takeover bids, the free rider problem, and the theory of the corporation. *Bell Journal of Economics* 11, 42-64.
21. Hansen, R. (1987). A theory for the choice of exchange medium in mergers and acquisitions. *Journal of Business* 60, 75-95.
22. Harris, E. (1990). Anti-takeover measures, golden parachutes, and target firm shareholder welfare. *Rand Journal of Economics* 21, 614-625.
23. Högfeldt, P., Högholm, K. (2000). A law and finance theory of strategic blocking and preemptive bidding in takeovers. *Journal of Corporate Finance* 6, 403-425.
24. Jarrell, G., Brickley, J., Netter, J. (1988). The market for corporate control: the empirical evidence since 1980. *Journal of Economic Perspectives* 2, 49-68.
25. Jensen, M. (1986). Agency cost of free cash flow, corporate finance and takeovers. *American Economic Review* 76, 323-329.
26. Jensen, M. (2004). The agency cost of overvalued equity and the current state of corporate finance. *European Financial Management* 10, 549-565.
27. Jensen, M., Meckling, W. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3, 305-360.
28. Jensen, M., Ruback, R. (1983). The market for corporate control: the scientific evidence. *Journal of Financial Economics* 11, 5-50.
29. Kane, E. (2000). Incentives for banking megamergers: what motives might regulators infer from event-study evidence? *Journal of Money, Credit and Banking* 32, 671-701.
30. La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R. (2002). Investor protection and corporate valuation. *Journal of Finance* 57, 1147-1170.

31. Malmendier, U., Tate, G. (2005). Does overconfidence affect corporate investment? CEO overconfidence measures revisited. *European Financial Management* 11, 649-659.
32. Martynova, M., Renneboog, L. (2008a). A century of corporate takeovers: what have we learned and where do we stand? *Journal of Banking and Finance* 32, 2148-2177.
33. Martynova, M., Renneboog, L. (2008b). Spillover of corporate governance standards in cross-border mergers and acquisitions. *Journal of Corporate Finance* 14, 200-223.
34. Martynova, M., Renneboog, L. (2009). What determines the financing decision in corporate takeovers: cost of capital, agency problems or the means of payment? *Journal of Corporate Finance* 15, 290-315.
35. Martynova, M., Renneboog, L. (2011). The performance of the European market for corporate control: evidence from the fifth takeover wave. *European Financial Management* 17, 208-259.
36. Moeller, S., Schlingemann, F. (2005). Global diversification and bidder gains: a comparison between cross-border and domestic acquisitions. *Journal of Banking and Finance* 29, 533-564.
37. Moeller, S., Schlingemann, F., Stulz, R. (2004). Firm size and the gain from acquisitions. *Journal of Financial Economics* 73, 201-228.
38. Moeller, S., Schlingemann, F., Stulz, R. (2005). Wealth destruction on a massive scale? A study of acquiring-firm returns in the recent merger wave. *Journal of Finance* 60, 757-782.
39. Myers, S., Majluf, N. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics* 13, 187-221.
40. Prescott, E., Visscher, M. (1980). Organization capital. *Journal of Political Economy* 88, 446-461.
41. Rau, R., Vermaelen, T. (1998). Glamour, value and post-acquisition performance of acquiring firms. *Journal of Financial Economics* 49, 223-253.
42. Roll, R. (1986). The hubris hypothesis of corporate takeovers. *The Journal of Business* 59, 197-216.
43. Shleifer, A., Summers, L. (1988). Breach of trust in hostile takeovers. In *Corporate takeovers: causes and consequences*, University of Chicago Press, Chicago.
44. Shleifer, A., Vichny, R. (1989). Managerial entrenchment: the case of managerial-specific investments. *Journal of Financial Economics* 25, 123-139.
45. Stulz, R., Walking, R., Song, M. (1990). The distribution of target ownership and the division of gains in successful takeovers. *Journal of Finance* 45, 817-833.
46. Sudarsanam, S., Mahate, A. (2003). Glamour acquirers, method of payment and post-acquisition performance: the UK evidence. *Journal of Business Finance and Accounting* 30, 299-341.
47. Summer, C. (1980). *Strategic behavior in business and government*. Little, Brown and Company, Boston.

## FROM STARTUP TO SME, FROM SME TO A MULTINATIONAL ENTERPRISE – KEY SUCCESS FACTORS OF GLOBAL GAZELLE COMPANIES - THE FORNETTI CASE STUDY

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### ABSTRACT

*WizzAir, LogMeIn, Fornetti, Ustream, MasterPlast, Prezi, Docler Holding, Tresorit – Hungarian success stories those are well known by most of us. The paper is about to explore the key success factors of the Hungarian-founded startups becoming global gazelle companies, based on in-depth interviews and case studies to introduce the internationalization process. By David Birch et al. (1979.), gazelle companies start their operation with a minimum investment of USD 1M and continuously keep up an annual growth of 20% in revenues year-by-year. These kind of international companies are presented in this research, that were founded by Hungarians. Where did the idea come from? What guided the founders? What kind of conjunctions of the ideal circumstances were needed to reach these results? Where to go from here? Push and pull effects determined primarily based on qualitative research, case studies and in-depth interviews, that based the success of these born global companies, either they started their activities with own funds or venture capital (VC) investment or with the help of business angels. The results of these case studies could have a significant impact on the future master's level entrepreneurship education, creating an inspiring theoretical environment for young talents with entrepreneurial ambitions.*

**Keywords:** *Aryzta, entrepreneurship education, Fornetti, franchise, internationalization, IPO, multinational, SME*

### 1. INTRODUCTION

The summer of 2015 was the most exciting period for the management of Fornetti, as the management had to decide over the future of the company and also over their own personal future as a manager in the company. After working for the company for several years, with enormous expanding projects and business plans for a 7-10 years horizon, the owner of the company had to decide over selling the company or keep working on international growth. Which option would be the best to choose:

- Keep on working and try to grow from your own power?
- Go for an IPO and gather money from the stock exchange investors?
- Sell the company and move one step back from the stage behind the curtain?

Fornetti is a Hungary-based frozen bakery product manufacturing company, founded by Mr. Jozsef Palasti and co-founder, Mr. Janos Galantai in 1997. They decided to separate their business and stop the cooperation in 2011. Fornetti's business was running very well in the past 18 years, although the years after the economic crisis was critical for them as their worldwide expansion plans did not succeed as the management expected that before. The professional mission of Mr. Palasti was to *invent the in-store baking (sight bakeries) and innovate the traditional process of bakery products manufacturing*, furthermore to spread the new consuming habits. Fornetti has reached its limits of growth and for the further expansion an experienced and professional partner with stable financial background was required. *In the summer of 2015, Fornetti was sold to the world's third largest frozen bakery products manufacturing company, the Irish-Swiss origin Aryzta AG. The new owner plans to invest EUR*

1M in the next half year into the further development of production and logistics areas of Fornetti and would strengthen Aryzta's market presence in Europe, simultaneously helping Fornetti to be the market leader in Central-Eastern Europe (CEE) and prepare for its expanding into the Western-European market.

## 2. MILESTONES OF FORNETTI – LOCAL, REGIONAL, GLOBAL

1997 – Mr. Jozsef Palasti master baker founded Fornetti as a family enterprise and started the production of frozen bakery products in a remodeled family house at Kecskemet, Hungary. The two main products were the traditional Hungarian cheese and bacon *scones (pogácsa)*, *that was sold by weight, not individually* (like its larger one versions per piece). Selling Fornetti's products were unique that time with its franchising system of showroom bakeries (so called „*sight bakeries*”, where customers could see, how the products are baked) and mobile baking ovens.

1998 – Fornetti Pannon has been founded in Igal, Hungary and owns the Master Franchise rights in Western Hungary. Fornetti's first large facility started production in Kiskunfélegyháza, Hungary with 3 new products: *chocolate, vanilla and apricot filled, sweet scones*.

1999 – Fornetti launches its new „product of the month” sale campaign and offering new products to the customers every month. *Girella* is introduced, which is a rolled mini croissant with different fillings and flavours. Fornetti franchise is now available in *Slovakia, Poland and Croatia*.

2000 – Fornetti's vehicle park redesigned with a new look, counting already 60 already. Fornetti has 1200 franchisees in Hungary with 1500 baking points and a total of 2700 baking points in Central-Eastern Europe. Franchise is also available in *Romania and the Czech Republic*.

2001 – The *new digitally controlled, in-store oven called „Forno di Fornetti”* is invented by Fornetti and has computer controlled baking features with easy programming and steady baking. New product on the market is the „*seedy sticks*” and Fornetti's new HQ in Kecskemet operates from now, as its franchise export centre with 4000 sqm operational area controls the work of 10 international master franchise companies.

2002 – Fornetti's advertising, flyers and packaging materials were redesigned, as well *Fornetti Express* products introduced with a reduced in-store preparation time of 35 minutes. Larger products are now available with individual selling (not only by weight, like the smaller snack pieces), and the frozen *Finger Food product line* is on the market in supermarkets for home baking and consumption. Fornetti franchise is available in *Serbia*.

2003 – An automatic order system is introduced for the franchise partners and the Kiskunfélegyháza factory is enlarged with a new baking tunnel with 1 ton / hour pre-baking capacity. New pre-baked products out on the market, like the *Croissant, Muffin and Pontino* (a small squared pizza slice) as well Fornetti Franchise steps into *Kuwait* and entered its first market out of Europe.

2004 – New pre-leavened products introduced, with an on-store pre-bake preparation time of only 15 minutes. *IFS food safety and ISO 9001:2000 certificates were obtained* and franchise is now available in *Ukraine* as well.

2005 – Fornetti Pannon's Igal factory is enlarged with a 3000 sqm new facility and the company also received the *IFS food safety certificate* for this plant. *Franchise Europe ranks the Fornetti Franchise 2nd in the food franchise category and 3rd overall in Europe on its top 500 list*. The first *Fornetti Altro* shop is introduced where the complete interior was designed and furnished by Fornetti.

2006 – A 3,5 million Euros investment in the Kecskemet factory – 3 new production lines with a capacity of 1 ton / hour each. 1,2 million Euros invested in a new ERP system including new customer service, order process and invoicing methods. Fornetti XXL products are on the market with larger size (110g) and competitive pricing.



2007 – 10th anniversary, new „*weekly favourites*” campaign in all shops for the same products with 20% discount. One of the most important raw material changed to trans fat acid free and non-hydrogenated margarine (vegetable fat).

2008 – New products are the pumpkin seed scones and the chocolate filled pastry. *Selling prices of all products were countrywide maximalized.*

2009 – XXL product weight is changed to 130g at the same price that was a real hit for the customers. *The Hungarian Franchise Association honours Fornetti with the „franchise network of the year” prize. Fornetti „New Era” programme started*, that means a completely new furnishing and design to be installed in all shops in the next 2 years.

2011 – Fornetti terminates the master franchise contract with Fornetti Pannon and loses a large part of its Western Hungarian and Croatian market. This was caused by the early unclear franchising rights between the two owners and the refusal of the „New Era” design and marketing elements to be applied by Fornetti Pannon.

2012 – Due to the „New Era” programme, many new stores joined to the image-refreshment action. Monthly sales are now over 100 Tons, the total yearly production of the company is 18642 Tons of frozen bakery products. New franchise markets are UK, Canada and Azerbaijan. This year, Fornetti was the one of the main sponsors of the Eurovision Song Contest 2012 in Baku, Azerbaijan as a part of its further international expanding and as a first step into the Caucasian market.

2014 – The international expanding of Fornetti was temporarily stopped on the UK and Chinese markets, mainly because of the negative effects of the Russian-Ukrainian war, where Fornetti had well established market position that was overwritten by the history. Until this year Fornetti had 800 employees in Hungary and an additional 500 employees abroad. The yearly turnover reached the amount of EUR 67 M in 2014 with the production and selling of around 32000 Tons of frozen bakery products partly through wholesale partners and its own 1000 franchise partners.

2015 – Fornetti was sold to the Irish-Swiss investor company Aryzta AG for an estimated amount of EUR 60 M. Aryzta joined to the management and already cooperated with Fornetti from the beginning of the year and assisted until the deal was made in August.

### 3. PRODUCTION TECHNOLOGY

Fornetti completely re-innovated the bakery product market since the late 1990s and early 2000s. *The idea of the owner, Mr. Palasti master baker was to provide warm, crisp and fragrant, fresh-made bakery products anytime during the whole day, every day.*

The traditional bakery product manufacturing process for decades, was to start the work in the bakeries in the evening hours, bake everything all through the night and deliver the products to the stores in the dawn or early morning hours. This means, that the customers could buy „fresh” (but already not oven-fresh) bakery products only in the morning hours. The exact quantity to be sold could not be estimated very well and the customers who bought what they need around noon or in the afternoon hours, could only buy parched and leftover products. Of course, although the whole food industry and food additive manufacturing was built on developing special additives to avoid quick loss of consistency of the bakery products, the customers were happy with Fornetti’s new technology and the offer of fresh bakery products anytime during the day.

The only exception was the traditional bread, where the shelf life was 2-3 days, Fornetti focused on smaller, bite-size bakery snacks, that can be purchased and consumed anytime during the day. *The only way to provide always fresh-made products, was the production method of pre-leavening, pre-baking and freezing of the products.* This manufacturing process guaranteed almost zero losses in the quality and nutrition values of the products, and the continuous freezing

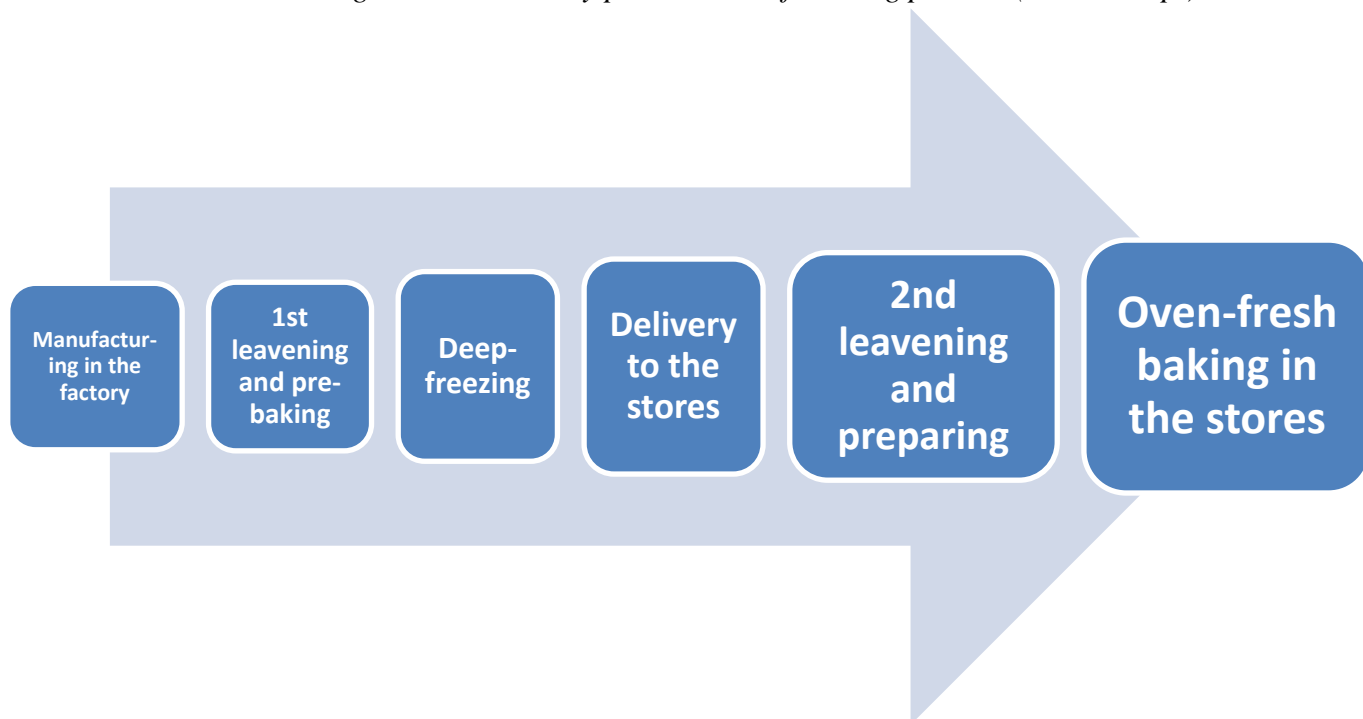
chain kept the franchise partners and bakeries always supplied with all kind of Fornetti's products.

Where the market does not reach the monthly quantity of 100 tonnes sold, Fornetti does not settle a factory. Fornetti has 3 production plants in Hungary (Kecskemét, Kiskunfélegyháza and Polgár), 2 in Poland and 1-1 in Romania, Ukraine and Bulgaria. In the largest Hungarian facility, there are 3 production lines with a maximum capacity of 1 tonne per hour in 21 hours a day (the remaining time is for cleaning and setting the machines for the production of different products).

Later, the Romanian factory was under bankrupt and the Bulgarian factory was closed, all CEE stores will be supplied from Hungary. In Romania Fornetti has invested 10 million Euros into this new factory but the interest rates became too high after the economic crisis, Fornetti paid all its partners but did not want the creditor bank to take its real estates and all other goods invested there. The Bulgarian factory was also a wallet drain, with no proper support of franchising system behind and the serious risk of the profile and product copy from the master franchise holder there.

Back to the innovative production technology, Fornetti made the frozen products in its own factories, then through the continuous frozen food delivery chain, goods are delivered to each store and kept in freezers until baking. Fornetti provides the special ovens for each store and *the traditional bakery product manufacturing process of baking in the night and deliver to stores in the morning was completely skipped and substituted by the freezing process.*

Figure 1: The bakery product manufacturing process (own concept)



#### 4. PRODUCT LINE

Company-wide reformation was a vision of Mr. Palasti already 6-8 years ago. First of all Fornetti continuously started to renew its product line. Due to the economic crisis Fornetti started to improve some new bakery products, these new products are quickly prepared and fresh only for two hours, that pushes down the preparation (baking) time and helps to avoid unsold leftovers. But due to the changed ingredients, when it is reheated before consuming, it has


almost the same quality as the freshly baked product. This came from Fornetti's main problem: *people do not want to eat Fornetti if it is not fresh* (although it is true that it is not as enjoyable when it is not fresh baked). Fornetti tried to solve this problem with changed raw material and preparation method. Other thing that was changed, came from the customer side. People usually buy Fornetti products only in the morning hours as a breakfast, so in 2012 Fornetti started to motivate them with *new slogans like „Fornetti in the evening hours as well”*.

Regarding to seasonal offers at Christmas Time, Fornetti has other seasonal products like sugar powdered crescent rolls, the traditional German-style strudels and the traditional American cookies in the product line. In an international view, Fornetti modifies its products depending on the local customer taste, which means that in the northern regions, people more like the sweet products, while in the southern part of Europe, the salty products are the pulling ones. On the international markets, Fornetti offers products developed for the taste and custom of the local consumers, for example seafood and crab filled bakery products in the Scandinavian region. Until 2012, Fornetti had around 200 different bakery products.

As discussed earlier, Fornetti should seriously change its product line in 2012 if they would like to stay competitive on the market. Earlier, the small products were sold by weight and it was the strongest sales factor of the company. But for example in Azerbaidjan people were buying the larger product as they thought it is cheaper. But for example, in the Hungarian market people seem to go by count as well, so they are not buying by weight anymore, but will only buy as much, that they can eat at once – and ask for like 5-10 pieces of small products when buying Fornetti. Due to the new development direction determined by the management, the introduction of new products continued in the past few years, all new marketing campaigns were show on the webpage and in all stores as well. *Special products, like baked „oven sandwiches”, pretzels, muffins and croissants were introduced to the markets*. The other interesting fact is that Fornetti always shows its special sale prices in all flyers and advertisement materials, dictating a strong price competition for the market competitors. One of the reasons for the success of Fornetti's products was the price factor, as it was a fresh, quick and affordable alternative of fast food for the consumers.

Though, Fornetti has been criticized many times by nutritionists for its low nutrition values and the less varied consumer consumption habits, Fornetti made serious efforts to change this entrenched label of cheap and simple fast food alternative, through improving ingredients, active campaigns to warn the customers about the risk of the lack of regular sports activities, as well the cooperation with healthy and famous nutritionists. Consumers usually bought Fornetti for breakfast but it was obvious, if a consumer eats bakery products every day and do not regularly do any sports, that can increase the risk of overweight, cardiovascular and cholesterol problems. So consuming less diverse foods (bakery products are mainly made of vegetable fat, flour, salt, sugar and yeast and the wide range of additives and fillings are not listed here) and the monotone, *every day consumption of refined sugars and an intake of serious carbohydrate amounts can be harmful for the health on a long term*.

Fornetti also suffered from a negative discrimination compared to other fast food alternatives, especially contrasted with healthy breakfast options like cereals, muesli, oatmeal, (boiled-, fried-, scrambled-) eggs, cottage cheese, yoghurt, fruits etc., that it is the food of the people who do not care about what they eat. As Fornetti was an affordable food option for the CEE consumers, where the monthly salary was about EUR 400-500 per month, these frozen and in-store baked products – with its *selling price* under EUR 0,5 / pc or EUR 6,00 / kg – *seemed to be impressive for the consumers who had a significantly lower monthly budget available to spend on food.*



PROS	CONS
<ul style="list-style-type: none"> <li>↗ affordable fast-food alternative for consumers</li> <li>↗ bakery products are consumed since centuries</li> <li>↗ available at almost every corner of the country through the franchising partners</li> <li>↗ bite-size snacks are easy to eat even on the go</li> <li>↗ products are developed for the taste of the local consumers</li> </ul>	<ul style="list-style-type: none"> <li>↘ less diversified food consumption can be unhealthy in a long term</li> <li>↘ bakery products have lower nutrition values</li> <li>↘ frozen bakery products are even more thought be less nutritious</li> <li>↘ Fornetti products were tagged as the "food of the impecunious"</li> </ul>

Table 1: Pros and cons of Fornetti's products (own concept)

## 5. FORNETTI FRANCHISE

In larger countries, the Fornetti franchise could mean a different sales method as its store system is modular and shops can be placed anywhere (streets, undergrounds, malls, etc.). Fornetti became successful in Hungary after the system change, when everyone wanted to be an entrepreneur. For a medium (M) size Fornetti store investors only need a store room, a freezer and some shelves and Fornetti provides the baking oven. If someone would like to be a master franchise holder it is a little larger bite. In this case the regional or aerial franchising fee is EUR 50.000 / 1 million people by population, then the royalty is 3% of the net revenue per year.

Because of the well-tailored shop interiors, Fornetti has its own furniture shop where the interiors are designed and mass produced. 13 different interior designs are available for the franchise owners, later the furnitures can be made in the home countries, where the master franchise was sold. This centralized furniture purchasing is also a push on the franchisee partners to continuously invest in the integrated company image and shop appearance.

Fornetti works with *two different types of master franchising contracts*, one is only a general sales franchise and the other version is mixed both for sales and production franchise. Next to

Romania, the Ukrainian franchise is also for local production. As usually when a company provides its know-how and experience with franchisees, the problems could be the followings:

- *Franchisee partners* (mainly the master franchise holders who are also controlling the local production) *deny to complete the new sales programs* – there are new marketing directions, renewed product range, new timing, new look for the shops etc. – and the partners should cooperate in this. In Hungary for example, there is a tendency of 20% increase in remodeling the current shops, but due to the franchising contract in force, the owner should finance this alteration project.
- There is also a *high risk in sharing the know-how for local production*, if it is not owned by the mother company, as the technology of frozen bakery product manufacturing is pioneer, but in some countries, master franchise contract holders may believe that it is a simple manufacturing process that can be easily copied. Sometimes this point of view is significantly occurs, when the master franchise contract holders have a strong sales network behind them.
- This risk is also forced by the unwelcomed decisions of the mother company, as *sometimes the master franchise holders feels the power in themselves, that they can also build a similar factory, then copy and run the franchising system under a new name*. Just like it already happened with Fornetti within Hungary and led to the break-up between the two founders of the company. To be honest, this process of the frozen bakery product manufacturing and selling was a breakthrough innovation, but the technology in itself is not that complicated and can be easily copied by competitors.

To be a master franchise owner of Fornetti abroad can a serious long term goal and motivating factor for investors. While a master franchise nominee becomes a cooperating partner and later a contract holder, it may take months or sometimes even years and these partners usually prepare and refine their first business plan together with the Hungarian Fornetti management. There is no price negotiation with wholesale traders, as Fornetti franchise has its own sales network, so this way franchising is a much better way (and at the same time – a more difficult way) to penetrate the international market.

In Hungary, there are currently around 3000 ovens in 1000 selling points, the fresh baked bakery product market is ruled by Fornetti with its 75% of the market share. In an international overlook, Fornetti has 2500 selling points internationally and around 1000 franchise contracts from Canada to Kuwait. But for example in Hungary, there are some significant market competitors, like the Albanian bakeries that keep growing from year to year, they usually own smaller chains (less than 10 units), but their products are also fresh baked and in-store prepared (so not frozen like Fornetti's products). *Albanian bakeries unifying the traditional overnight bakery product manufacturing with Fornetti's pre-frozen and in sight-bakery prepared process*. Market competitors also offering fresh-made bakery products, but all of the products are made locally, that needs a lot more human workforce, serious investments in the machinery of the shops, plus an additional risk of unsold leftovers.

The big question was for Fornetti that it was still worth to go abroad in the upcoming years if Hungary is still the pulling market? The strategy was to clean the company portfolio, cut everything off that needs too much money. Fornetti is about to terminate all the franchising contracts with the master franchise holders in Serbia, Slovakia, Czech Republic, Ukraine and an other may follow in Turkey next year.

- The decision point is to stay or leave these countries?

- The franchising opportunity is open, but should Fornetti strike back to former franchise holders or try to find an other new partner who is financially strong and loyal to the company?

Market entrance is depending on the foreign strategic partner as first year's franchising fee usually covers only first year's investment capital spent by Fornetti. Fornetti can only work with legal way of doing business and with a real presence in a country's market. Taking some remarkable examples from the everyday business flow for example, the above mentioned Bulgarian facility that was closed down was moved to Egypt as a wreck (importing machinery to Egypt is cheaper this way). As well Fornetti considered that the Turkish master franchise owner company is wasting the money, but only expanded within Istanbul and showed no progress in other regions in Turkey, that can be a serious disadvantage in the countrywide expansion, although the Turkish underground shop presence in Istanbul and the government-supported school food supplement is a unique business success.

## 6. INTERNATIONAL EXPANSION

*Since the beginning, marketing strategy was always developed by Mr. Palásti, but there is also a sales and a marketing executive as a part of the holding structure. Fornetti is checking the current market situation before entering, looking after who is already on the market (e.g. at petrol stations, food courts at megastores, etc.) before positioning themselves. Usually they undergo with pricing, but provide a better quality with positioning in the middle, where not the price is the differentiating factor. It is much better, when people are not choosing by price but instead of this, they choose by what they want to eat. It can be clearly seen from the monthly revenues how much money people have. Fornetti usually offers new improvements to abroad as well, but international partners usually tell them what they need. As discussed before, Fornetti currently offers around 200 different products, including the product range for wholesale partners like Aldi or Lidl, where in-store bakeries also offering fresh baked, Fornetti-made products. So the total product line covers Fornetti's own product range, the international Fornetti franchise partner's special needs, plus the wholesale partners frozen and in-store baked products, through a total of 4 selling channels of the frozen bakery products manufactured by Fornetti.*

Before entering into a new foreign market, Fornetti first makes its one of a kind market research when the company plans to expand in a new country. Fornetti usually expands through a greenfield investment, that starts with the owner Mr. Palásti's personal visit in the region or in the largest centre (e.g. capital of the country) with significant traffic and population.

*Fornetti focuses on the average consumer, the product line of the supermarkets and the available product range and possible food alternatives of Fornetti's products, that can be found in smaller shops.* One most important thing that helps to hit the market well, is that eating on the streets are accepted. Regarding to the raw materials, Fornetti focuses on the price of the pork and poultry meat and as well the vegetable prices. For example where there is a wide range of meat products available, usually the final products are sophisticated as well. The consumers' purchasing power is also very important when positioning the products in the new markets.

When the positive decision was made and the company decided to enter into the new market, Fornetti has its usual working frame and expansion plan to show up in new regions. First, they find a franchisee who owns the master franchise as this know-how overtaking company will know the local regulations of food processing and selling, plus they can choose the product line quite well, that they would like to start the selling with. Taking some real-life business situations again, for example in Canada, the products must contain enriched flour that contains other vitamins and minerals that should not be added later to the product. Or in the Turkish market Fornetti had to specialize the products to the local taste and improve a bakery product called „pitos” (a new word built from the Greek names pita and gyros), that has a filling tastes like the

gyros or döner kebab meat, that meets with the taste of Greek and Turkish consumers. One more interesting thing that is against the tendency in the CEE region, was that *Fornetti won the government's support in Turkey to provide healthy food for the schools* as its products were modified to be taken as healthy food, while *in Hungary for example, Fornetti's products are thought to be equal with unhealthy food* that will make everyone fat who eats it. But this kind of thinking and discretion became general only because products are frozen and usually this is also generated by market competitors. In one of the monthly magazines, the owner of Budapest's famous Déryné confectionery said that their sweet and salty products are not the same with the sight bakery's (like Fornetti) „pumped” products. On the other hand for example in Kazakhstan, Fornetti's products are sold in its master franchise holders premium level Eclair confectioneries.

As discussed before, usually Mr. Palasti is choosing the target country, but Fornetti has never had to find or need to find new franchising partners, because *Fornetti is always choosing from the wide range of applicants*. As Mr. Palasti is an intuitive person, he usually falls in love with countries, regions and possible applicants and when he says „he's a good man”, it is sure for him that they can make business together. But as the American saying goes „Would you buy a car from this man?” *sometimes Fornetti failed with these weak based and incautious business relationships*. Usually Mr. Palasti has 60% against the Fornetti management that has only 40% „voting right” or „influencing capability”, when Fornetti decides over new expandings. Fornetti always has some new directions, that can be possible future target markets but still can be kept under control. Based on the market control experience of 10-20 million capita markets, Fornetti can not straight enter into billion capita markets like China, where their products possibly could be successful, but one city can be as large as a smaller country in Europe. As well if Fornetti usually enters the new market with small steps and without enough market cover and strenght, its products and manufacturing method can be easily copied by competitors.

It seems to be easier to enter and understand markets which can be reached within a smaller delivery distance and has similar cultural background as Hungary had before. These are the eastern slavic and post-Russian countries. The franchising fee is based on the number of the population in one country or in a larger inhabited region. The franchisee have to calculate that how many people can be reached, as for example suburban and rural regions are more difficult to reach. Fornetti is currently continues discussion about the Russian franchise, where the franchisee company would buy the franchise rights from the Western border until the Ural mountains. From this market covering, it can be clearly seen that except the larger cities, most of this region is very rural with its small and medium size villages and inhabited areas. As discussed earlier, an other important thing that might help to hit the market, is the consumption of flaky pastry is common, as well public eating on the streets is accepted.

*Entering into Russia's market was the most realistic expanding plan for Fornetti in the past few years*. The company was about to optimize the production capacity of its Kiev factory in Ukraine from where the Russian market could be easily reached and supplied. There is a duty-free agreement between Ukraine and Russia (0%), so the master franchise owner in Russia can be supplied from here until its own factory can be built there. *Unfortunately, the history overwrote this expanding plan, due to the 2014-2015 Russian military intervention in southern Ukraine, that had very bad economic effects on the whole country*.

Berlin, Germany was also a possible target but as the German market was in depression, Fornetti has rejected this opportunity. There are investors who think that food industry is a safe harbour, so there was only one possible investor who owns different bookmaker (online sports betting) shops and wanted to open about 15 Fornetti units in Berlin, but Fornetti did not cooperate this way, as they only sell regional master franchise licenses. Western Europe (especially France) could be a possible market but, still not a priority, even if whole Europe is similar to the globalized world and completely different cultures can be reached Europewide

from the South up to Scandinavia. *Fornetti also had discussions in the Spanish, UK, Canada and US markets* as European franchises are warmly welcomed overseas, but business connections and venture capital is strongly required for the efficient market entrance.

*Other possible locations were in the Far East*, as Vietnam, Laos and Cambodia are dynamically developing, but for example, financial investment in Laos could be very risky. Cambodia was a French colony, European products are well known there and Fornetti's products could be placed on this market at a competitive price. Public sanitation is not developed, it is desired to become more European, especially because people do respect quality food. Thailand is more sophisticated, where tourism is important, but there is a wide range of quality food products available on the streets.

In these developing countries the food is not a question of life, people can spare on buying cheap food products. For example in Romania, the black economy of the food market is uncontrolled and serious, in larger cities people are selling pretzels on the streets, with no permission that can cause serious losses for Fornetti and they can not do anything with it.

## 7. MANAGEMENT OBJECTIVES

Transforming the former company structure (Ltd.) to holding structure was needed also for the possible future stock exchange entrance and separating the different functions and finances of each Fornetti subsidiaries. There were several different Fornetti companies founded, for example for production, for transportation, for real-estate management or for machinery and furnishing manufacturing and service, that could be unhealthy to keep all functions in one company. Next to Mr. Palasti's entrepreneurial skills and market experience, evolving a professional management was also very important.

The three most important players in his team are Jozsef Szabo dr., Attila Banhidi and Zoltan Kovacs. They also resort some professional help when negotiating with a bank, etc. Management members cannot say that „I'm against it", as there will be no more respect for this person within the management in the future. This may sound like a dictating leading of the company and a pressured loyalty to the owner, but this way, the risk of the market failure can be taken over by the main decision maker, Mr. Palasti, the owner of the company. Mr. Palasti was listed between the 100 richest Hungarians in the 44th place with his estimated fortune of HUF 17,3 billion in 2015.

### Team before 2015

Jeno Fekete – Logistics Director  
Gabor Hajdu – Technology and Operations Director  
Attila Jeszenoi – IT director  
Mihaly Kis – Investment Director  
Gabor Lantos – Production Director  
Tibor Molnar – Franchise Network Director  
Ildiko Palasti – Creative Director  
Gabor Papp – Franchise Technology Director  
Miklos Suth dr. – Strategic Director  
Andras Szabo S. – Nutritionist  
Gyorgy Szilagyi – QC Director



#### Management before 2015

Attila Banhidi – Sales and Marketing Director  
Zoltan Kovacs – Financial Director  
Jozsef Palasti – Founder and Owner of Fornetti  
Jozsef Szabo dr. – Managing Director of Fornetti Holding

#### Management in 2015

Attila Banhidi – CCMO Director, Managing Director  
Sebastian Gooding – CEO  
Balthas Klein – CSO Director, Managing Director  
Zoltan Kovacs – CFO Director, Managing Director  
Gyula Vidacs – COO Director, Managing Director

#### Team in 2015

Jeno Fekete – Logistics Director  
Gabor Hajdu – Technology and Operations Director  
Attila Jeszenoi – IT Director  
Mihaly Kis – Development Director  
Gabor Lantos – Production Director  
Tibor Molnar – Franchise Network Director  
Jozsef Palasti – External Consultant, Brand Ambassador  
Gabor Papp – Franchise Technology Director  
Miklos Suth dr. – Strategic Director  
Andras Szabo S. – Nutritionist  
Gyorgy Szilagyi – QC Director

Names shown in alphabetical order.

It's clear from the list above, that after the acquisition of Fornetti by Aryzta AG, there was no significant change in the management structure. The only exception is Mr. Gyula Vidacs, who is also an employee of Fornetti since 1998, but previously stayed in the back and was the managing director of Fornetti Europe Ltd.

## Master Franchise Partners

- Albania
- Azerbaijan
- Bosnia and Herzegovina
- Bulgaria
- Canada
- Czech Republic
- Kosovo
- Kuwait
- Romania
- Macedonia
- Moldova
- Montenegro
- Poland
- Russia
- Serbia
- Slovakia
- Spain
- Turkey
- Ukraine
- United Kingdom

Franchise partners (units) count in 2015 – **a total of 6464 units** worldwide

## Wholesale partners

- Austria
- Belgium
- Denmark
- Germany
- Ireland
- Luxembourg
- Netherlands
- Spain
- Sweden
- Switzerland
- Ireland

*Table 2: Partners of Fornetti in different countries (own concept)*

## 8. ABOUT ARYZTA

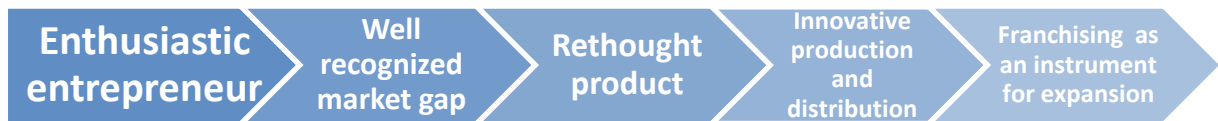
Aryzta is a food business company, based in Zurich with operations in the Americas, Europe, Asia, Australia and New Zealand. It is incorporated in Switzerland and Aryzta refers to itself as the third largest frozen bakery company in the world. The group has a leadership position in the speciality frozen bakery sector and is a global supplier of baked goods to the foodservice, retail and quick service restaurant sectors. Aryzta became the largest bakery in the world after acquiring more bakeries in Germany and North America in the first half of 2014. The Zurich-headquartered group reported third-quarter revenues (for the three months to the end of April in 2013) of just over EUR 1.37 billion. This represents a year-on-year rise of nearly 17%. Group revenue for the first nine months of its financial year (which runs to the end of July) grew by just over 7% year on year, up to EUR 3.47 billion. The company was founded as the Irish Co-Operative Agricultural Agency Society in January 1897 and renamed the Irish Agricultural Wholesale Society ('IAWS') in December 1897. It was first listed on the Irish Stock Exchange in 1988. In June 2007, it spun off its agribusiness activities as Origin Enterprises plc. It merged with Hiestand Holding AG in August 2008 and, having changed its name to Aryzta, commenced trading on the SIX Swiss Exchange and the Irish Stock Exchange on 22 August 2008. Aryzta bought Honeytop Speciality Foods in September 2011. In 2013, it acquired Klemme AG (Klemme frozen bakery products) for EUR 280 million, a German manufacturer of frozen bakery products, running 6 factories, with a strong position in German retail channels with EUR 234 million annual turnover. In 2014, Aryzta acquired 100 per cent of both Pineridge Bakery in Canada and Cloverhill Bakery in the US. The combined consideration of these acquisitions was EUR 730 million, with further post-acquisition investments of EUR 70 million anticipated to support a strong growth pipeline and integration. In 2015, it acquired the Hungary-based Fornetti group which has operations in central and eastern European markets.

## 9. CONCLUSION

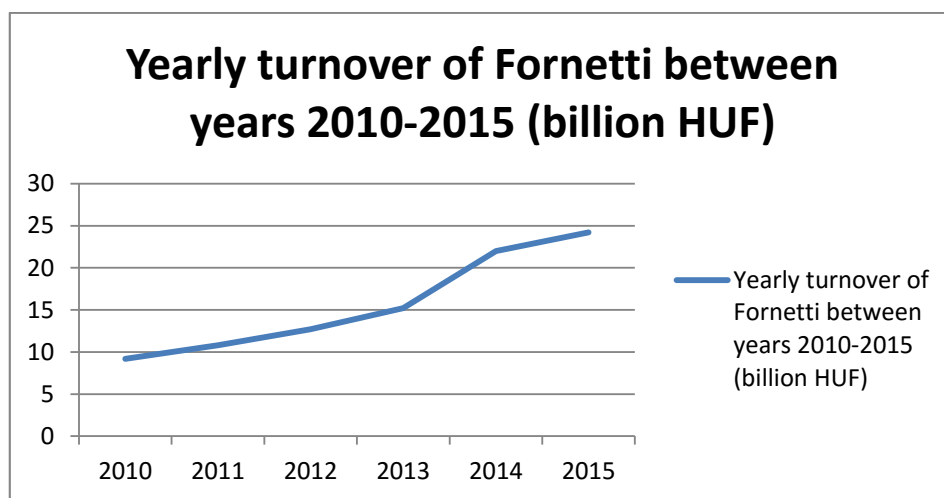
In this case study an important decision point of Fornetti Franchise was introduced. After 18 years of successful and intensive growth, the company reached its limits of growth. The major managerial questions to be considered are the followings:



Figure 2: Major managerial questions to be considered (own concept)



*Figure 3: Key factors of Fornetti's success story (own concept)*



*Table 3: Yearly turnover of Fornetti between years 2010-2015 (in billion HUF – own concept)*

Considering the facts in this case study, was it the right decision to sell the company in 2015?

## LITERATURE

1. Personal interview with Mr. Miklos Suth dr., Strategic Director of Fornetti on 14.11.2011
2. <http://www.fornetti.hu> downloaded on 21.11.2015
3. <http://www.franchiseeurope.com/top500/fornetti/102/> downloaded on 22.11.2015
4. <https://en.wikipedia.org/wiki/Aryzta> downloaded on 22.11.2015
5. [http://www.hvg.hu/gazdasag/20150806\\_forbetti\\_eladas\\_reszletek](http://www.hvg.hu/gazdasag/20150806_forbetti_eladas_reszletek) downloaded on 15.11.2015
6. <http://www.origo.hu/gazdasag/20151019-szentkiralyi-fronetti-fuzio-vallalat.html> downloaded on 15.11.2015
7. [http://hvg.hu/vallalat\\_vezeto/20150805\\_Eladtak\\_a\\_fornettit](http://hvg.hu/vallalat_vezeto/20150805_Eladtak_a_fornettit) downloaded on 15.11.2015
8. [http://www.portfolio.hu/vallalatok/eladtak\\_a\\_fornettit.217895.html](http://www.portfolio.hu/vallalatok/eladtak_a_fornettit.217895.html) downloaded on 15.11.2015

9. [http://www.mfor.hu/cikkek/vallalatok/Eladtak\\_a\\_Fornettit\\_.html](http://www.mfor.hu/cikkek/vallalatok/Eladtak_a_Fornettit_.html) downloaded on 15.11.2015
10. <http://www.uzletresz.hu/eladas/20150901-eladas-exit-forbes-lista-magyar-vallalkozas-siker.html> downloaded on 15.11.2015
11. <http://www.uzletresz.hu/vallalkozas/20150805-a-svajci-aryzta-ag-felvasarolta-a-fornettit.html> downloaded on 15.11.2015
12. <http://www.vg.hu/vallalati-adatok/fornetti-kft> downloaded on 21.11.2015

## GENDER AND AGE SPECIFICATIONS OF ASSESSING LIFELONG EDUCATION IN ORGANIZATIONS

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### ABSTRACT

*Implementation of lifelong education in organizations, which includes primarily development of skills and creativity of employees, is an inevitable prerequisite for increasing the quality of human capital. The concept of lifelong education was defined in the research project on the basis of the attributes of teaching-learning practice, acceptance of an interactional model of this type of education, inclusion of the participants in this education, its preparation and evaluation, mutual interaction amongst the participants, emotional and cognitive factors, and also specifications of the environment, culture, age, gender and understanding of the lifelong education not as a reparative or supplementary, but an elective process. The report presents results of an analysis of differences in assessment of lifelong education between men and women, younger and older employees of organizations, and between administration workers and production workers. Confirmed were the differences from the viewpoint of age and gender. Contrarily, differences from the perspective of work areas were not confirmed. Men accentuated advantages which could be brought by lifelong education (career advancement, evaluation of employees). Women, on the other hand, highlighted the impact of education on the work performance and development of interpersonal relationships on the workplace. It is obvious that men perceive a greater subjective contribution of lifelong education for their own benefits. Women see this contribution as related to another person. From the viewpoint of age, older employees assessed the selected attributes of lifelong education more positively than the younger ones. Older employees perceive it as more motivating, more significant and meeting their expectations; they are more satisfied with it and evaluate its impact on improvement of interpersonal relationships on the workplace more positively. Overall, lifelong education in organizations is assessed more positively mainly from the viewpoint of acquiring new knowledge, self-development, self-recognition, and improvement of communication with people. Finally, lifelong education helps employees to take over the responsibility for their own career.*

**Keywords:** Age, Gender, Human capital, Lifelong education

### 1. INTRODUCTION

It applies for the present and the future that only those private and public sector organizations will survive and be prosperous, which can react on time and flexibly to social, technological,

economic, cultural and political changes. Survival and growth will depend on their ability to cope with the demands placed on these changes. It means that contemporary as well as new employees will constantly have to acquire new knowledge, skills, attitudes and viewpoints (Buckley and Caple, 2009).

## **2. EDUCATION AND DEVELOPMENT OF HUMAN CAPITAL**

Strategic development of human resources is in accordance with the belief that the human capital of an organization is one of the main preconditions of its competitive advantage (Armstrong and Taylor, 2014). According to Becker (1964), human factor has a decisive impact on the productiveness based on development of skills and creativity. It means a continuous and purposeful formation of an adequate quality of people which corresponds with the contemporary and future needs of the organization. For this it is necessary to create conditions for education and training of people.

Goals of the strategic development of human capital are based on an assumption that one of the important components of a successful organization is represented by the engaged employees who identify themselves with the role of an organization member responsible for operation and success of the organization. To fulfill this role, motivation and qualification provided by lifelong education are required (Kasper and Mayrhofer, 2009).

Human capital development requires implementation of education not only in the area of qualification increase, but also in the area of the mental life of employees, which is connected primarily to motivation, creativity, values and attitudes towards the organization and its goals.

“To be educated” means that a person has undergone and keeps undergoing a long-term process of education. A scientific finding is useful only when applicable in practice. The aim of education is, besides development of skills and abilities, also to change the behavior, thinking, and attitudes of employees. These elements have a positive impact on the future of an organization and its sustaining in a competitive market (Hrbáčková et al., 2011).

One of the important aspects of the teaching-learning practice is development of lifelong education on the basis of everyday experience and problems encountered by the actors of this education (Ribeiro and Mont'Alvão, 2015).

When developing a model of lifelong education, the factors of mutual interaction among the participants of education, emotional and social factors, as well as the environment, culture, age, gender and other specifications come to the fore. The process of utilization of these interactions itself may be characterized in 4 steps: 1) identification of the needs and determination of requirements, 2) development of projects which fulfill these requirements, 3) development of interactive versions of these projects in order for them to be communicated and evaluated, 4) interim evaluation of the results. These steps are based on an assumption that the participants will take part also in preparation of the project (Ribeiro and Mont'Alvão, 2015).

Another significant feature of lifelong education in an organization is accentuated by Castro and Amorim (2015). These authors specify lifelong education not only as reparative or supplementary, but as an elective process. Therefore, the added value of this education is highlighted. Authors also claim that implementation of lifelong education is based on acceptance of 3 requirements: 1) Basic education determines the way of career advancement. 2) Autonomy of decision-making about when, where and how a person is further formed. 3)

Ensuring the conditions of education attendance, investigation of this process and proposal for intervention implications.

### 3. RESEARCH

On the basis of the aforementioned attributes of the teaching-learning practice in lifelong education and acceptance of interactional involvement of the participants in this education in its preparation, the main objective of this study was to analyze the differences in evaluation of lifelong education between men and women, junior and senior employees, and between administration workers and production workers.

#### 3.1. Research sample

For the purposes of this research, 133 respondents, who were attending lifelong education at the time of the research, were addressed. Out of this number 57 were men aged from 22 to 76 years (average age: 46.3) and 76 women aged from 24 to 69 years (average age: 42.9). There were 79 junior employees aged up to 56 years, and 54 senior employees aged over 56 years. Administration area was covered by 78 respondents and the area of production provided 55 respondents.

#### 3.2. Data collection

Collection of empirical data was carried out by means of an own, original questionnaire which contained 19 items evaluated on a 5-point Likert scale (1 = no, 2 = rather no, 3 = I don't know, 4 = rather yes, 5 = yes).

The acquired data were processed by means of Student's t-test for independent selections in SPSS 20 (statistical software).

#### 3.3. Results

We assumed there were statistically significant gender differences in evaluation of individual aspects of lifelong education. The differences detected in the answers of men and women are presented in Table 1.

*Table 1: Differences in evaluation of lifelong education between men and women (own elaboration)*

Education	Gender	Mean	Standard deviation	t (Test criterion)	Sig (2-tailed) (Significance)
Do you need lifelong education to carry out your profession?	man	2.14	1.032	4.761	<b>0.000</b>
	woman	3.54			
Do you see any benefits in lifelong education?	man	2.55	0.553	4.503	<b>0.024</b>
	woman	2.20			
Does your lifelong education influence your career advancement?	man	3.12	0.946	2.501	<b>0.000</b>
	woman	2.85			
Is employee evaluation assessed also from the viewpoint of lifelong education?	man	3.35	0.618	3.172	<b>0.003</b>
	woman	2.12			
Does lifelong education improve interpersonal relationships in the workplace?	man	2.31	0.628	2.303	<b>0.022</b>
	woman	3.13			



The presented mathematical and statistical data analysis confirmed the existence of statistically significant differences in the answers of men and women when evaluating five of the attributes of lifelong education in an organization. Men evaluated lifelong education more positively in the context of advantages it could bring them (career advancement, evaluation of employees). Women, on the contrary, evaluated given education more positively from the perspective of its impact on work performance and development of interpersonal relationships in the workplace. These results prove that men perceive a greater subjective contribution of lifelong education for their own benefits. Women perceive this contribution outside their own person.

In the context of the conducted research we also assumed there were statistically significant age differences in evaluation of lifelong education. The detected differences in the answers of junior and senior employees in evaluation of the selected aspects of lifelong education are illustrated in Table 2.

The results of mathematical and statistical analyses of acquired data confirmed the existence of statistically significant differences in the answers of junior and senior employees when evaluating six of the attributes of lifelong education in an organization.

Quite unequivocally, all these attributes of lifelong education were evaluated more positively by senior employees than junior employees. Lifelong education is more significant to senior employees as they see in it more advantages, motivation, meeting their expectations and they are also more satisfied with it. Simultaneously, they evaluate the impact of this education on improvement of interpersonal relationships in the workplace more positively. The presented positive evaluation of lifelong education is probably connected to the rich experiences of senior employees with lifelong education and its positive impacts on various areas of life of an organization.

*Table 2: Differences in evaluation of lifelong education between younger and older employees (own elaboration)*

Education	Age	Mean	Standard deviation	t (Test criterion)	Sig (2-tailed) (Significance)
Is lifelong education meaningful to you?	junior	3.14	0.532	3.721	<b>0.008</b>
	senior	3.54			
Do you see any benefits in lifelong education?	junior	2.15	0.559	3.503	<b>0.021</b>
	senior	2.65			
Does lifelong education improve interpersonal relationships in the workplace?	junior	3.12	0.446	2.541	<b>0.000</b>
	senior	4.85			
Do you see lifelong education as motivating?	junior	2.35	0.617	3.172	<b>0.033</b>
	senior	2.52			
Are you satisfied with the forms and methods of lifelong education?	junior	3.31	0.628	2.303	<b>0.022</b>
	senior	4.13			
Has lifelong education met your expectations?	junior	3.31	0.518	2.303	<b>0.000</b>
	senior	4.23			

The presented research project includes also an analysis of differences in evaluation of lifelong education between administration and production employees. The results of mathematical and statistical analyses of acquired data did not confirm the existence of statistically significant differences in the answers of administration and production employees when evaluating

individual attributes of lifelong education in an organization. The aforementioned results are presented in Table 3.

*Table 3: Differences in evaluation of lifelong education between administration and production employees (own elaboration)*

Education	Work area	Mean	Standard deviation	t (Test criterion)	Sig (2-tailed) (Significance)
Do you believe it is necessary to educate yourself alongside your job?	administration	2.35	0.650	3.931	0.105
	production	2.15			
Do you believe it is important to get further education for your profession?	administration	3.35	0.541	4.075	2.598
	production	2.61			
Is lifelong education meaningful to you?	administration	2.20	0.417	3.572	3.722
	production	3.61			
Do you need lifelong education to carry out your profession?	administration	2.19	0.600	5.384	3.642
	production	2.37			
Is newly acquired knowledge useful in your profession?	administration	3.15	0.283	3.211	1.614
	production	2.68			
Do you see any benefits in lifelong education?	administration	3.05	0.164	3.407	0.681
	production	2.11			
Does your lifelong education influence your career advancement?	administration	3.35	0.082	3.388	0.483
	production	2.69			
Is employee evaluation assessed also from the viewpoint of lifelong education?	administration	2.35	0.639	4.531	1.723
	production	2.11			
Does lifelong education improve interpersonal relationships in the workplace?	administration	3.30	0.033	4.037	2.805
	production	2.21			
Do you see lifelong education as motivating?	administration	3.05	0.617	3.711	3.776
	production	2.79			
Are education and development of employees supported in your profession?	administration	3.33	0.377	5.484	1.540
	production	2.66			
Does your company have an elaborated program adequate for development and education of its employees?	administration	3.04	0.525	3.565	3.987
	production	2.61			
Is it appropriate to receive education during working hours?	administration	2.35	0.350	3.192	0.646
	production	2.19			

Are you satisfied with the conditions of lifelong education from your employer's part?	administration	2.30	0.013	4.067	2.845
	production	2.11			
Does your employer accept your lifelong education?	administration	3.05	0.517	3.741	0.776
	production	2.79			
Are the contents of education related to your work performance?	administration	3.33	0.477	5.489	1.549
	production	2.66			
Did you receive any study texts which you could utilize also after your education is finished?	administration	3.04	0.597	3.665	0.987
	production	2.61			
Are you satisfied with the forms and methods of lifelong education?	administration	3.04	0.544	3.735	0.787
	production	2.61			
Has lifelong education met your expectations?	administration	2.35	0.445	3.712	1.646
	production	2.79			

#### 4. DISCUSSION AND CONCLUSION

Lifelong learning is one of the main driving forces of a complex development of employees. Simultaneously, it is an inevitable prerequisite for increasing the quality of human capital in an organization, which is immediately connected to the effectiveness and productiveness of this organization (Becker, 1964).

As it was mentioned before, human capital development requires implementation of a multidimensional concept of lifelong education which is related not only to the increase in the qualification level, knowledge and skills, but also to motivation, creativity, values and attitudes of employees towards their organization and life as a whole.

Lifelong education of employees is becoming a decisive power of development and prosperity of an organization; it is one of the significant factors which influence these processes. It is clear that only those organizations, which are aware of the significance of human capital and which are ready to invest in its development, may secure implementation of their business plans and competitiveness in the market.

Effective implementation of lifelong education in the aforementioned context must be based on the feedback communication with the participants of this education. The research findings support the fact that evaluation of the attributes of lifelong education in an organization does not consist of only one homogeneous whole. Contrarily, it is possible to specify certain structural elements of evaluation of lifelong education. Frankovský et al. (2015) proposed and verified a methodology labeled as SBES (Significance, Benefits, Expectations and Satisfaction), which on the basis of extraction of mentioned factors enables structured evaluation of lifelong education in an organization. Significance of external and internal factors of motivation within lifelong education as structural elements of its evaluation was accentuated also by Buckley and Caple (2009).

The presented attributes of lifelong education, in which differences between men and women and senior and junior employees were detected, were proved significant also in the research of

Birknerová (2013, 2014). Employees see benefits of lifelong education in organizations primarily in acquisition of new knowledge, self-development, self-recognition, and improvement of communication with people (Birknerová and Frankovský, 2015).

The key factor of development of any organization is, according to Fitzgerald (1992), its employees. Their development is inevitable in order for the employees to fulfill new challenges, and for the long-term health and viability of an organization. Staff development puts an organization into a position where it may directly face changes. In fact, the developed work force does not react to the change but rather creates it itself. One of the most important determinants of success is the ability to learn, create innovations and react to changes. Therefore, the area of education of employees is crucial in every organization (Tej and Ali Taha, 2011). From the employees' perspective it means that they will have to take over more and more responsibilities for their own education and careers (Buckley and Caple, 2009).

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#### **LITERATURE**

1. Armstrong, M. and Taylor, S. (2014). *Armstrong's Handbook of Human Resource Management Practice* (13th edition). London: Kogan Page.
2. Becker, G. S. (1964, 1993). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education* (3rd edition). Chicago: University of Chicago Press.
3. Birknerová, Z. (2013). Celoživotné vzdelávanie – predpoklad kultivácie osobnosti [Lifelong education – precondition for cultivation of personality]. In T. Roháčová and V. Slodičák (eds.), *Možnosti kultivácie osobnosti v technologickom veku* (pp. 93-101). Košice: TU Košice.
4. Birknerová, Z. (2014). Rozvoj ľudských zdrojov – ďalšie vzdelávanie a výcvik zamestnancov [Human capital development – further education and training of employees]. *Promanager*, 26 March 2014, 8 p. Retrieved 13.10.2015 from <http://www.promanager.sk/hr-management/rozvoj-ludskych-zdrojov-dalsie-vzdelavanie-a-vycvik-zamestnancov>.
5. Birknerová, Z. and Frankovský, M. (2015). Vnímanie firemného vzdelávania a motivácia zamestnancov vzdelávať sa [Perception of corporate training and motivation of employees for education]. In F. Lipták (ed.), *Manažment podnikania a vecí verejných – dialógy*. Bratislava: Slovenská akadémia manažmentu, o.z..
6. Buckley, R. and Caple, J. (2009). *The Theory & Practice of Training*. London: Kogan Page.
7. Castro, M. M. C. and Amorim, R. M. (2015). The Initial and Continuing Education: conceptual differences that legitimize a space for permanent education for life. *Cadernos CEDES*, 2015 (vol. 35, no. 95), pp. 37-55. Retrieved 12.10.2015 from <http://www.scielo.br/pdf/ccedes/v35n95/0101-3262-ccedes-35-95-00037.pdf>.
8. Fitzgerald, W. (1992). Training Versus Development. *Training & Development*, 1992 (vol. 46, no. 5), pp. 81-83. Retrieved 10.10.2015 from <http://lms.powercam.cc/sysdata/user/42/irisli/blog/doc/6aaf13ba58c720ef/attach/160.pdf>
9. Frankovský, M., Birknerová, Z., Štefko, R., Zbihlejšová, L. and Zahatňanská, M. (2015). *Possibilities of Determining the Effectiveness of Corporate Training* (research report

presented at World Congress on Education (WCE-2015), October 19-21, 2015, Dublin, Ireland). *in print*

10. Hrbáčková, K., Hladík, J., Vávrová, S. and Švec, V. (2011). Development of the Czech Version of the Questionnaire on Self-Regulated Learning of Students. *The New Educational Review*, 2011 (vol. 26, no. 4), pp. 33-44. Retrieved 10.10.2015 from [http://www.educationalrev.us.edu.pl/vol/tner\\_4\\_2011.pdf](http://www.educationalrev.us.edu.pl/vol/tner_4_2011.pdf).
11. Kasper, H. and Mayrhofer, W. (2009). *Personalmanagement – Führung – Organisation*. Wien: Linde Verlag.
12. Ribeiro, C. E. and Mont'Alvão, C. (2015). The Influence of Interface Design on Knowledge Management through Virtual Communities of Practice for Permanent Education in Health. *International Journal of Innovation, Management and Technology*, February 2015 (vol. 6, no. 1), pp.46-51. Retrieved 12.10.2015 from <http://www.ijimt.org/vol6/572-H024.pdf>.
13. Tej, J. and Ali Taha, V. (2011). Analytical insight into problems of vocational education in the Slovak republic. *Problems of education in the 21st century*, 2011 (vol. 34), pp. 162-169. Retrieved 02.03.2012 from <http://journals.indexcopernicus.com/abstract.php?icid=966184>.

## THE ROLE OF INVENTORIES IN DECISION MAKING

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### ABSTRACT

*Nowadays, effective inventory management is »conditio sine qua non«, especially for manufacturing companies. Generally, it is important to maintain the optimal volume of different types of current assets to avoid unproductiveness, slowdowns in company's production process and inefficient financial management. There weren't many significant researches on how inventory management reflects on market value of Croatian companies. It was one of the reasons why this research was carried out. In the business economy, optimalization of inventory is one of the basic principles of corporate management in goods-monetary economy. Optimalization of inventory volume is a very complex issue because it is necessary to have sufficient inventories on the one side, and to avoid unnecessary surplus on the other side. Main objective of this paper is to analyze how inventory management reflects on market value of a company, e.g. to determine the relationship between inventories and stock prices. Financial information was gathered from financial statements which are publicly available on Zagreb Stock Exchange official website and stock price movement data was obtained from same source. Sample comprises 75 companies which have been listed on Zagreb Stock Exchange's Regulated market in financial years 2013. and 2014.*

**Keywords:** *Inventories, Decision making, Listed companies, Zagreb Stock Exchange, Croatia*

### 1. INTRODUCTION

Global crisis has also shown that the company policy cannot be successfully managed without the effective inventory management. Global and national financial crisis mainly affected the liquidity of companies and influenced company's inventory policy. It is quite understandable that even the smallest increase in costs of inventories, can further affect the level of available payment funds and therefore the liability payment.

The inventories are one of most important part of current assets which influence can have significant effect on the value of company. This paper analyzes how inventory management reflects on market value of a company. Correlation analysis and t-test will be used to determine the relationship between volume of the inventory and stock exchange price using inventory to total assets ratio and inventory to current assets ratio. These studies were carried out on the companies that are listed on the Zagreb Stock Exchange.

### 2. ACCOUNTING REGULATIONS (IAS 2 - INVENTORIES)

The existence of a separate International Accounting Standard for inventories confirms the importance of inventories and their impact on the accounting treatment. International Accounting Standard 2 – »Inventories« defines objective, scope and definition of inventories.

The objective of this Standard is to prescribe the accounting treatment for inventories. A primary issue in accounting for inventories is the amount of cost to be recognized as an asset and carried forward until the related revenues are recognized. This Standard provides guidance

on the determination of cost and its subsequent recognition as an expense, including any write-down to net realizable value. It also provides guidance on the cost formulas that are used to assign costs to inventories.

IAS 2 defines Inventories like assets:

- ⤴ held for sale in the ordinary course of business;
- ⤴ in the process of production for such sale; or
- ⤴ in the form of materials or supplies to be consumed in the production process or in the rendering of services (IAS 2, OG 136/2009).

### 2.1. IAS 2 measured Inventories and Cost of inventories

**Net realizable value** is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

**Fair value** is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction

Inventories shall be measured at the lower of cost and net realizable value.

The cost of inventories shall comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition (IAS 2, OG 136/2009).

## 3. DATA, HYPOTHESES AND RESULTS

### 3.1. Financial data and sample structure

Financial data was gathered from financial statements publicly available on Zagreb Stock Exchange's (ZSE) official website. Sample consists of 75 companies listed on ZSE's regulated market. In order to enter the sample, it was required that company's stocks have been traded at the stock exchange at the ending of observed years (in December of 2013. and 2014.).

In order to be listed on ZSE's regulated market, companies must meet strict regulations which imply higher transparency standards (disclosing significant amount of information which lays more stable fundamentals for investor's decision making process). Companies included in sample are heterogeneous regarding activities to which they belong (Table 1.).

Inventory to current assets ratio and inventory to total assets ratio were used to present change of inventory amount during the financial year 2014., and stock prices were used to represent market value fluctuation for observed companies.

**Table 1.** Categorization of listed companies (National Classification of Activities)

Classification codes	Activities	Number of legal persons included in the sample
01 - 03	Agriculture, Forestry and Fishing	3
10 - 33	Manufacturing	26
41 - 43	Construction	4
45 - 47	Retail and Wholesale Trade, Repair of Motor Vehicles and Motorcycles	4
49 - 53	Transport and Storage	8
55 - 56	Accommodation and Food Service	19
59 - 63	Information and Communication	2
68	Real Estate	1

69 - 75	Professional, Scientific and Technical Activities	7
90 - 93	Arts, Entertainment and Recreation	1
<b>TOTAL</b>		<b>75</b>

### 3.2. Hypotheses

Following hypotheses have been established before conducting research:

**Hypothesis 1.1.** – there is statistically significant positive relationship between inventory to total assets ratio change and stock price change.

**Hypothesis 1.2.** – there is statistically significant positive relationship between inventory to current assets ratio change and stock price change.

**Hypothesis 2.1.** – there is statistically significant difference between inventory to total assets ratio change for companies which have experienced price increase and companies which have experienced price decrease in one year period. Companies whose stock prices have increased are expected to have higher inventory to assets ratio change.

**Hypothesis 2.2.** – there is statistically significant difference between inventory to current assets ratio change for companies which have experienced price increase and companies which have experienced price decrease in one year period. Companies whose stock prices have increased are expected to have higher inventory to assets ratio change.

**Hypothesis 3.1.** – there is statistically significant difference between inventory to total assets ratio change in two observed years,

**Hypothesis 3.2.** – there is statistically significant difference between inventory to current assets ratio change in two observed years.

## 4. RESEARCH RESULTS

Inventories are very delicate asset category because companies should ponder very carefully on amounts they are planning to maintain. High amounts of inventory can cause lack of other current assets types (i.e. cash), opportunity costs of keeping excess inventory etc.

*Table 2. Correlation between changes of company's value and amount of inventory*

		P_delta	INV / CA_delta	INV / TA_delta
P_delta	Pearson Correlation	1	0,023	0,308**
	Sig. (2-tailed)		0,847	0,008
	N	74	74	74
INV / CA_delta	Pearson Correlation	0,023	1	0,675**
	Sig. (2-tailed)	0,847		0,000
	N	74	75	75
INV / TA_delta	Pearson Correlation	0,308**	0,675**	1
	Sig. (2-tailed)	0,008	0,000	
	N	74	75	75

\*\* . Correlation is significant at the 0.01 level (2-tailed).



Correlation analysis was used to determine the relationship between volume of the inventory and stock exchange price movement. Results comprised in Table 2. imply that there is significant, positive and moderately strong relationship between change of market prices and inventory to total assets ratio which is significant at 0,01 level. On the other side, significant relationship between change of market prices and inventory to current assets ratio was not found.

**Table 3. T-test for Equality of Means – comparison**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% C.I.***	
									Lower	Upper
INV / CA_delta	EVA*	1,58	0,213	1,11	73	0,272	0,0335	0,0303	-0,0269	0,0939
	EVNA**			1,09	64	0,279	0,0335	0,0307	-0,0277	0,0948
INV / TA_delta	EVA*	10,96	0,001	2,14	73	0,036	0,0324	0,0152	0,0022	0,0626
	EVNA**			2,08	46	0,043	0,0324	0,0156	0,0010	0,0638

\*EVA – Equal Variances Assumed

\*\*EVNA – Equal Variances Not Assumed

\*\*\*95% Confidence Interval of the Difference

**Table 4. T-test for Equality of Means – comparison**

	P_delta	N	Mean	Std. Deviation	Std. Error Mean
INV / CA_delta	1 – rise	39	0,0133	0,1113	0,0178
	0 – decline	36	-0,0202	0,1497	0,0250
INV / TA_delta	1 – rise	39	0,0079	0,0355	0,0057
	0 – decline	36	-0,0245	0,0872	0,0145

Table 3. presents t-test which was used to determine is there a difference in value of inventories to current assets ratio and inventories to total assets ratio between companies whose market value of stocks has risen in one year period and companies whose market value of stocks has declined over identical period. Results imply that there is a significant difference, but only for inventories to total assets ratio and for inventories to current assets ratio there isn't. Table 4. can be used for more detailed analysis in terms of value of inventory to total assets ratio. It is evident that companies which have experienced rise in their market value also had an increase in their inventory to total assets ratio and vice versa.

**Table 5. Paired Samples Test**

	Paired Differences				t	df	Sig. (2-tailed)
	Mean	Std. Error Mean	95% Confidence Interval of the Difference				
			Lower	Upper			
INV / CA _2013 - INV / CA _2014	-1,76%	1,60%	-4,94%	1,42%	-1,098	116	0,275
INV / TA _2013 - INV / TA _2014	0,34%	0,51%	-0,66%	1,35%	0,683	116	0,496

Paired samples test has been conducted to examine the relationship between two observed ratios in different moments of time (at the end of financial years 2013. and 2014.). As results from Table 5. show, there is no statistically significant relationship for inventories to total assets ratio and inventories to current assets ratio in two observed years.

## 5. HYPOTHESES ACCEPTANCE / REJECTION AND RESULTS EXPLANATION

Findings of the research are succinctly presented in the table below:

**Table 6. Hypotheses – status of acceptance**

	Hypothesis	Status	Direction of relationship / Explanation
1.1.	There is statistically significant positive correlation between inventory to current assets ratio change and stock price change.	REJECTED	-
1.2.	There is statistically significant positive correlation between inventory to total assets ratio change and stock price change.	ACCEPTED	POSITIVE
2.1.	There is statistically significant difference between inventory to total assets ratio change for companies which have experienced price increase and companies which have experienced price decrease in one year period. Companies whose stock prices have increased are expected to have higher inventory to assets ratio change.	REJECTED	-
2.2.	There is statistically significant difference between inventory to current assets ratio change for companies which have experienced price increase and companies which have experienced price decrease in one year period. Companies whose stock prices have increased are expected to have higher inventory to assets ratio change.	ACCEPTED	Favourable for companies which stock value has risen
3.1.	There is statistically significant difference between inventory to current assets ratio change in two observed years.	REJECTED	-
3.2.	There is statistically significant difference between inventory to assets ratio change in two observed years.	REJECTED	-

Sub-hypotheses 1.2. and 2.2. were accepted which pinpoints to need of their closer analysis. Both of them showed results in favour of companies which had more conservative approach to inventory (higher inventory ratios). According to the results, it can be concluded that effect of having extra amount of inventory exceeded the effect of prudently choosing form of current assets which will ensure lower opportunity costs.

Despite the fact that lower liquidity level can lead to higher profitability, it can also include greater level of risk (Van Horne, Wachowicz, 2014., p. 209.). One of the possible reasons in

favour of positive relationship is inflation which leads to higher prices of older inventories which consequently results in higher profits (King, 1994., p. 315.) and companies can also speculate in which way the prices will move in order to secure additional profit if prices go up (Ivanović, 1997., p. 193.). Also, it is prudent to keep »safety stock« in order to neutralize negative effect of delays which can cause problems in production cycle (Brooks, 2013., p. 408.). Conditions of inventories purchase also affect company's decision on amount of inventories they maintain because it is necessary to keep additional amount of inventory for companies which operate in uncertain environment (Ivanović, 1997., p. 193.) what is intrinsic for every market by its nature.

On the other side, it is also important to mention downsides of keeping excess inventories:

- lower liquidity levels can lead to higher profitability (Van Horne, Wachowicz, 2014., p. 209.) because money is not »locked up in working capital« (Deloof, 2003., p. 574.),
- interest rates can also be one of the influencing factors because higher interest rates are connected to higher opportunity costs of keeping excess amounts of current assets (Brooks, 2013., p. 409.),
- inventories also have »carrying costs« which affect profits (Brooks, 2013., p. 408.).

When analysing results, the difference between different activities must be also taken into account. Companies from certain industries maintain very high amount of current assets (which are measured in billions) and consequently they have to tie up large amounts of capital much longer before it finally has effects in revenues, while companies from some other industries operate without any inventories at all. Ship construction can be taken as example of »slow inventory turnover« (Ivanović, 1997., p. 192.).

## 6. CONCLUSION

The market value of a company depends on many factors. Inventory management is one of the factors that can affect the value of a company.

The conducted research implies that there is significant, positive and moderately strong correlation between change of market prices and change of inventory to total assets ratio. On the other side, significant relationship between change of market prices and change of inventory to current assets ratio was not found.

It is also concluded that there is statistically significant difference between inventory to total assets ratio change for companies which have experienced price increase and companies which have experienced price decrease in one year period in favour of companies which have experienced price increase over one year period.

Previous research has confirmed the impact of inventories on the stock price but the influence regarding direction and the intensity of change in stock prices and inventories require deeper analysis.

## LITERATURE

1. Belak, V. (2014). *Analiza poslovnje uspješnosti*. RRiF Plus d.o.o., Zagreb
2. Brooks, R.M. (2013): *Financial management: core concepts*. Pearson Education Inc.
3. Deloof, M. (2003): *Does Working Capital Management Affect Profitability of Belgian Firms?* Journal of Business Finance & Accounting
4. *Intenational Accounting Standard 2*, Official Gazette 136/2009
5. Ivanović, Z. (1997): *Financijski menadžment*. Sveučilište u Rijeci

6. King, A.M. (1994): *Total Cash Management*. Alfred M. King
7. Pallant, J. (2007). *SPSS Survival Manual*, McGraw-Hill
8. Van Horne, J.C., Wachowicz, J.M. (2014): *Osnove financijskog menadžmenta*. MATE d.o.o. Zagreb
9. Vidučić, Lj. (2006): *Financijski menadžment*. RRiF Plus d.o.o.
10. *Zagreb Stock Exchange*. [official website: zse.hr]

## TMT BEHAVIOUR AND WAYS OF FIRM'S GROWTH: IS THERE ANY CONNECTION?

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### **ABSTRACT**

*A serious dilemma for firms has always been how much discretion should be granted to their managers so that they have sufficient decision-making latitude to respond to market changes. At the same time, managers are also under appropriate monitoring while they are seeking competitive advantages for the company so that they do not make decisions that may harm shareholders' interests. In this paper the concept of perceived managerial discretion, which has been long neglected by academics, and proposed that the fit between perceived managerial discretion and market competition would significantly impact on firms' growth strategy is investigated. Based on prior literature, we have tried to explain the relationship between perceived TMT motives for firms' growth. The significance of diversification implementation can be seen through potential increase of firm performance or through managerial motives to diversify (an increase in compensations). Motives for the implementation of the diversification are numerous and vary from company to company. Existing research has identified several common motives for the diversification strategy, such as firm growth, survival of the company, risks reduce and increase in profitability, depending on the type of diversification (related or unrelated) they are implementing. Managers can perform unrelated takeovers in order to increase their own compensations. The fact that large firms CEOs generate higher compensations does not imply itself that increase of firm size leads to the increase of their own revenues (Werin and Wijkander, 1992). The obtained results from the sample of Croatian firms showed that in large companies there is a difference in the type of diversification strategy they are applying in addition to the way of implementation of the growth strategy, that distinguish depending on the industry in which the firm operates.*

**Keywords:** *firm's growth, top management team, M&A, diversification*

### **1. INTRODUCTION**

Dynamic business environment drives firms towards practicing different growth strategies in order to successfully position themselves on the market. Growth strategies are concerned with increasing the size and viability of the business over time with the final aim of building and sustaining their competitive market position. A successful growth strategy will allow firms to increase its customer base, market segments, geographical scope, and/or product lines, which should lead to revenue growth. Permanent growth enables them to build and sustain their competitive market position. In planning growth strategies, managers should be concerned with three key issues: (1) where do we allocate resources within our business in order to achieve growth, (2) what changes in business scope do we see as compatible with growth and overall strategic decision, and (3) how do we time our growth moves compared to competitors (Harrison and St. John, 2008)?

This study points out that in order to increase personal compensations; managers sometimes evaluate firm's growth not considering its profitability. Managers can perform unrelated takeovers in order to increase their own compensations. Mentioned managerial reasons for diversification are based on the existence of certain imperfections in corporate governance, namely the mechanisms by which stockholders control corporations and their managers. If

stockholders could assess those takeovers that would increase profits, and those that wouldn't, and focus management only on those takeovers that increase stockholder value, the possibility of acquisitions managed by managers would disappear (Besanko et.al., 2007).

Hambrick and Finkelstein (1987) introduced and elaborated the concept of managerial discretion. They defined managerial discretion as executives' latitude of action and argued that the latitude is formed during the multiple process of a repeated game about their rational action between the executives and the stakeholders of the firm. Managerial action is determined by three sets of factors: the task environment, the internal structure of organization and the manager himself or herself.

In prior studies it has been suggested that greater managerial discretion enables managers to shape firms more significantly, and moreover increases the influence of managerial characteristics on organizational outcomes (Finkelstein & Hambrick, 1987). From the perspective of agency theory, high managerial discretion allows managers to work for personal benefits rather than for those of shareholders. While contingency theory points out that executive in diversified firms ask for more compensation than that in non-diversified firms as their more complicated environment, executives adopt some strategies such as mergers and acquisitions (M&A) and diversification in order to increase their compensation. According to Hambrick and Finkelstein's opinion, the degree an executive can affect the organizational behavior and performance, depends on particular environment, and the organizational performance is the function of environment and executives' behavior. Different organizational environment or executive will lead to different organizational performance.

Reviewing from the conclusions above we confirmed that, there is a common view behind the factors such as ownership structure, degree of supervision, diversification and enterprise' scale, which is such factors determined the difference of managerial discretion. Higher managerial discretion means higher marginal product, higher risk and also means that executives' higher compensation.

## **2. BEHAVIOUR OF TOP MANAGEMENT TEAM IN ORDER TO ENHANCE FIRM GROWTH**

The relationship between managerial behaviour and firm's growth has long been a critical issue in management research. In the previous literature researchers have found that the impact of managerial actions on firm performance depends on several managerial factors, among which managerial discretion is the most commonly cited. Managerial discretion refers to the ability of executives to affect key organizational outcomes (Hambrick & Finkelstein, 1987). Because the influence of managers on organizational outcomes differs according to their level of decision making authority, the subject of managerial discretion has led to important theoretical explanations of several phenomena of interest to scholars researching organizations and strategies, such as chief executive officer (CEO) compensation (Finkelstein & Boyd, 1998; Magnan & St-Onge, 1997), executive profiles (Haleblian & Finkelstein, 1993), and management team tenure (Finkelstein & Hambrick, 1990). In prior studies it has been suggested that greater managerial discretion enables managers to shape organizations more significantly, and moreover increases the influence of managerial characteristics on organizational outcomes (Finkelstein & Hambrick, 1990).

Since the managerial discretion hypotheses argued that managers diverted some of the profits of the firm to the pursuit of their own interests, and that these interests were often closely tied to the size of the firm, the early studies of compensation tended to test whether profits or sales

were more closely correlated with compensation. Studies have shown that top management fees do not depend primarily on business results of the firm, but may also depend on size of the firm, usually measured by sale (Barney and Hesterly, 2006: 234). Thus encourages managers who want to increase their income to ensure firm growth. One of the easiest ways to achieve growth is by diversification, which is usually unrelated, through merger and acquisition. With large acquisitions firms may grow continually in a short period of time, and thereby provide higher revenues to top management. Top management only needs to take care of economic profit, i.e., that profit level is not so low that the firm becomes a potential target for a hostile takeover, or to encourage owners to make change of management.

In recent years, the influence of firm size on managerial compensations became less important, while in the same time compensations of senior management are becoming more associated with firm performance. Especially, the use of stock options and other forms of deferred compensations highlights firm growth as the most important interest to managers.

Therefore, the desire for higher compensations and managerial risk reduction are two basic managerial motives for firm diversification (Combs and Skill, 2003). In other words, top managers may opt for a diversified firm with the aim of diversifying their own job risk as long as profitability does not suffer.

However, diversification provides additional benefits for managers, the ones that owners don't have. Research results have shown that diversification and firm size are much related, and if firm size increases, compensations of management will increase also (Gray and Cannella, 1997). Furthermore, large firms are considered to be more complex, and therefore more difficult to manage, which leads us to significant compensations to managers. Higher levels of diversification can increase complexity of firm, as well as managerial compensations for managing diversified firm. Corporate governance mechanisms, such as the board of directors, supervisory board or market for corporate control can limit management in overextend diversification.

But sometimes the above mentioned mechanisms are not strong enough, allowing managers to diversify firm to the point where even the average returns can't be achieved (Janney, 2002). Loss of adequate internal mechanisms can result in lower relative success of a firm, and a possible threat of takeover. Despite the fact that takeovers can increase efficiency by changing ineffective top management, managers can avoid takeovers by using various defensive tactics (e.g., poison-pill or golden parachute). Therefore, the threat of takeover may restrict managers, but can't completely control motives of managers for diversification (Duane Ireland, Hoskisson and Hitt, 2009).

*Jensen* indicates that managers simply enjoy leading large firms, because corporate growth entails social eminence, public reputation and influence, and political power of top managers (Jensen, 1989). Stockholders want firm growth only if such growth leads to increased profit. Therefore, *Jensen* also indicates that managers evaluate firm growth, regardless of whether it is profitable or not.

Diversification can create value also in the case when the managers are able to identify firms undervalued in the stock market. There is often scepticism towards such a reason for diversification, especially if target firm operates in the field unrelated to activities of an acquirer. There is a possibility that market value of targeted firm is incorrect and that other investors have not yet realized this fact. Also, the mere announcement of takeover draws

attention, often leading to other potential acquirers bidding for targeted firm. Biddings as such, are not rare, and serve to reduce the potential takeover gains for the acquirer. Probably the biggest problem is perception of how winning bidders, in auctions and similar sale arrangements, usually overpay targeted firm value, unless diversified firm owns much more IT about targeted firm than other bidders (Besanko, Dranove, Shanley and Schaefer, 2007: 173).

Managers can perform unrelated takeovers in order to increase their own compensations. The fact that large firms CEOs generate higher compensations does not imply itself that increase of firm size leads to the increase of their own revenues (Werin and Wijkander, 1992). *Avery et. al.* found no difference in wages growth between CEOs who performed takeovers and those whose businesses naturally grew. On the other hand, *Bliss and Rosen* conclude that executive directors of banks who made acquisitions had a big increase of their own compensations (Bliss and Rosen, 2001). *Amihud* and *Lev* assume that managers perform unrelated takeovers to protect themselves from the risk (Amihud and Lev, 1981). They observe that stockholders are not inclined to change top management, except in case of bad business of the firm. In order to reduce the risk of job loss, managers must reduce the risk of bad business. One way to achieve this is through unrelated acquisitions. They showed how firms run by management participate in more conglomerate acquisitions than firms run by the owners. Although such acquisitions reduce risk of job loss for top management, they don't always bring benefits for stockholders. These stockholders can reduce their own financial risk by managing their portfolio of investments (for example by investing in mutual funds) (Besanko et.al., 2007:175).

Mentioned managerial reasons for diversification are based on the existence of certain imperfections in corporate governance, namely the mechanisms by which stockholders control corporations and their managers. If stockholders could assess those takeovers that would increase profits, and those that wouldn't, and focus management only on those takeovers that increase stockholder value, the possibility of acquisitions managed by managers would disappear (Besanko et.al., 2007:175). However, stockholders most often have a hard time detecting acquisitions that will increase profits, because they don't possess such IT, nor are they skilled enough to make such conclusions. Furthermore, it is difficult to change management decisions, even if stockholders disagree with them. Formally, supervisory board is responsible for monitoring management in order to ensure that management actions increase stockholder value.

Market for corporate control is a mechanism of corporate governance. Its fundamental assumption is as follows: market price of the stocks adequately reflects the effectiveness of management (Manne, 1965). Model of market for corporate control assumes that managers have the right to manage a firm as long as its market value can't be significantly improved by the alternative group of managers with an alternative business strategy (Tipurić, 2008: 299). *Manne* lies out that market for corporate control represents an important limitation for managers' actions (Besanko, et.al. 2007: 177). Managers who perform takeovers that don't meet interests of stockholders will find stock prices of their companies falling for two reasons. First, if managers overpay diversified acquisition, value of their firm will be reduced by the same overpaid amount. Second, if the Stock Exchange expects that a firm will overpay additional takeovers in the future, the market value of firm stocks will fall today in anticipation of these events. This inequality between actual and potential stock price of firm presents an opportunity for some other entity (individual, other firm or specialized investment bank) to execute takeover. A potential acquirer can gain control of the respective firm by simply buying the firm stocks on the market. With sufficiently large package of stocks, acquirer may vote its own slate of directors and appoint managers who will work on increasing stockholders value.



With the purchase of shares at the actual price and later introducing changes that will return shares to the potential value, acquirer can gain some earnings.

Observation of the market for corporate control as the market in which alternative groups of managers are competing for the rights to manage corporate resources represents a shift from traditional understanding of the mechanism. According to traditional understanding suppliers of financial resources and active stockholders (alone or in coalition) "buy" control of corporation and hire and dismiss management in order to achieve better use of resources.

Inefficient business of management will be reflected in capital market by reducing the value of stocks. Thus market for corporate control represents a constant threat to management as a mechanism of disciplining their behaviour. Finally, an active and liquid capital market represents assumption of efficient functioning of market for corporate control.

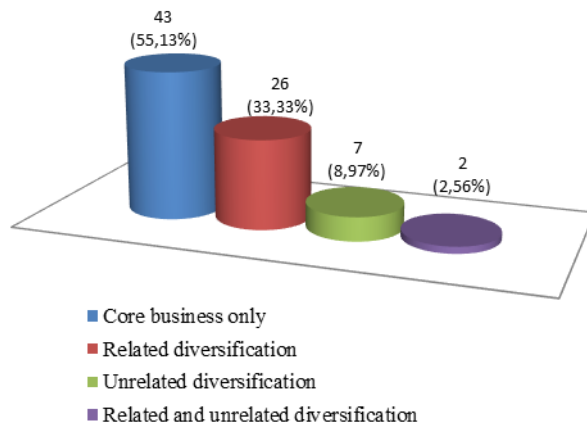
### **3. METHODOLOGY**

The subject of this research is focused on the analysis of managerial motives for growth through diversification by observing the macro-level factors, especially the industry as a guideline of implementing diversification strategy of large firms in Croatia. The characteristics of individual industry are very important determinants of the managerial decision on which type of the diversification, related or unrelated, the firm will apply.

In order to realize the objectives of the research the population of large firms in Croatia has been used. Analysis was conducted for 78 large Croatian firms (Daraboš, 2011).

The figure 1 shows the structure of the sample and the number of firms in relation to the scope and variety of businesses in which they operate. More than half of firms from the sample (55,13%) operates only within their core business, and do not apply the diversification strategy. 33.33% of firm from the sample operates in other businesses that are associated with the core business of the company, and apply related diversification strategy, while 8,97% of companies from the sample operates in businesses different than the core business (unrelated diversification). From the results of research has arisen that there are companies in the sample (2,56%), which simultaneously use both, related and unrelated diversification strategy or operate in industries that are associated with the core business, but also in completely different industries that their core business is in.

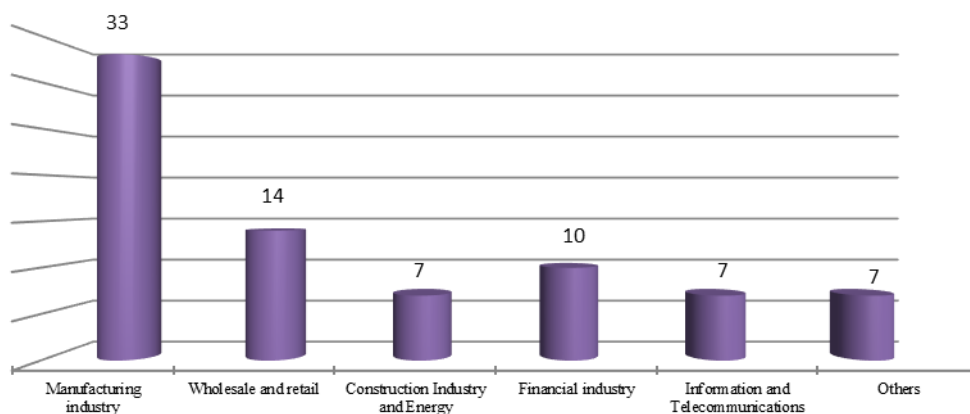
*Figure 1 Sample description*



In order to improve the hypothesis, firms from the sample are grouped into industry groups, according to the core business they operate in. Industries are grouped into six groups: 1 - Manufacturing, 2 - Wholesale and Retail Industry, 3 - Construction Industry and Energy, 4 - The Financial Industry, 5 - IT and Telecommunications, 6 - Others. The sixth group consist of the companies that according to their core business we weren't able to group in any of the previous classes, thus we arrange them in the group named Others.

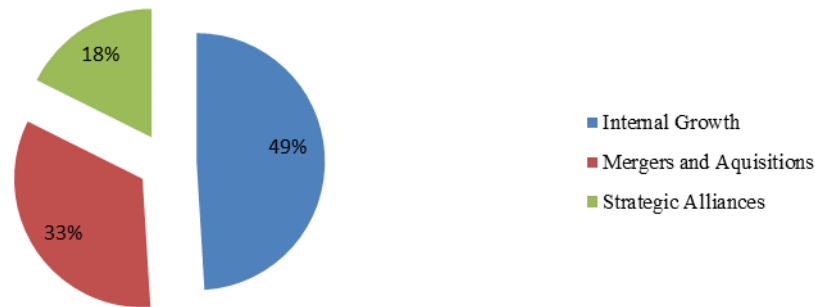
The figure 2 shows the distribution of firms from the sample into industry groups, regardless of implementing a diversification strategy or not. The Manufacturing industry makes 33 companies in the sample, Wholesale and Retail Industry 14 companies, 10 in Financial Industry companies, while in the group Construction Industry and Energy as well as IT and Telecommunications, and the group Others were 7 companies in each group.

*Figure 2 Distribution of firms from a sample into industry groups*



Afterwards, the ways of implementing a diversification have been examined (Daraboš, 2011). The most common way of implementing this strategy is internal growth (49% of companies from the sample), that is an expected result given the frequent use of diversification strategies associated with the companies from the sample. 33% of companies from the sample have implemented a diversification strategy through mergers and acquisitions, while strategic alliances are the least represented as a way of implementing a diversification strategy (18%).

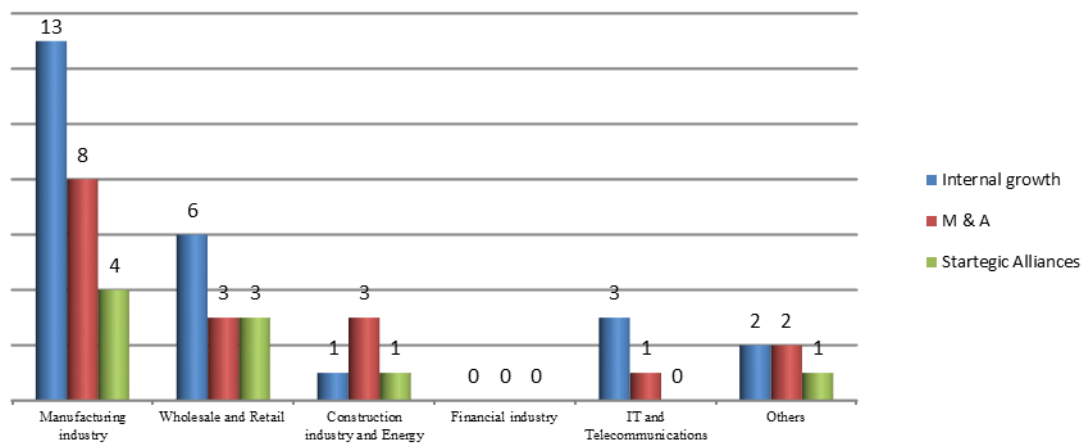
*Figure 3 Ways of growth in firms from the sample*



#### 4. RESULTS AND DISCUSSION

Next figure is a graphical representation of the difference in ways of growth of firms from the sample in relation to industry in which firms operate.

*Figure 4 Ways of growth of firms from the sample across industries*



In order to test the frequency of using related and unrelated diversification in large Croatian firms we have selected firms from the sample that are implementing diversification as the growth strategy and grouped them depending on the type of diversification they are using. Firms were distributed into 3 groups for the purpose of descriptive analysis: (1) firms that are implementing related diversification, (2) firms that are implementing unrelated diversification, and (3) firms that are implementing simultaneously both, related and unrelated diversification strategy. We put that in the relation with types of growth they are using to implement diversification: internal growth, mergers and acquisitions and strategic alliance.

The number of firms from the sample that are implementing diversification was compared to the number of firms that are using certain way of growth to implement diversification. The results showed that the most common way of firms' growth is internal growth that is 43,02% of firms from sample were implementing diversification through internal growth. Mergers and acquisitions are the second common way of implementing diversification, i. e. 33,33% of firms from the sample used M&A's to pursue firm growth, while the smallest number of firms are

pursuing growth strategy by participating in some strategic alliances, i.e. 17,65% of firms from the sample.

*Figure 5 Firms from the sample according to the type of diversification and the ways of growth*

	Internal growth	M & A	Strategic Alliance
<b>Firm is operating in other businesses that are connected to its core business (related diversification)</b>	20	11	7
<b>Firm is operating in other industries that are totally different to its core business (unrelated diversification)</b>	3	5	2
<b>Firm is operating in both, related and unrelated businesses</b>	2	1	0
<b>TOTAL</b>	<b>43,02%</b>	<b>33,33%</b>	<b>17,65%</b>

In order to determine whether there is a difference in the frequency in implementation of a diversification strategy depending on the industry in which the firm operates the non-parametric test for independent samples - Kruskal - Wallis test has been applied, since the sample of firms that apply a diversification strategy was relatively small. Focus is on the fact that there are differences in the frequency of implementing diversification strategy and that the difference depends on the industry in which the firm operates. The results showed that there is a statistically significant difference in the implementation of a diversification strategy and that it varies across the industries ( $\alpha=10\%$ ,  $\chi^2=9,545$ ,  $df=5$ ,  $p\text{-value}=0.089$ ).

It is interesting to note that there is more common use of related diversification strategy than unrelated diversification strategy in all industry groups. Moreover, it's important to point out that it is highly represented in firms within the group Wholesale and Retail Industry, IT and Telecommunications, as well as in group Others (42,86%). While unrelated diversification strategy is the most frequently used in firms within the group Manufacturing Industry (15,15%).

The results obtained on a sample of large Croatian firms are in accordance with the results of previous research in the world that have shown differences in the implementation of the diversification strategy as well as different types of diversification strategy across different industries that can be explained by certain characteristics of particular industry, such as high entry barriers, number of competitors in the industry, higher transaction costs, industry volatility, etc. Therefore, we can conclude that presented results showed that in large Croatian companies there is a difference in the type of diversification strategy they are applying in addition to the way of implementation of the growth strategy, that distinguish depending on the industry in which the firm operates.

## 5. CONCLUSION

For companies involved in highly competitive industries, competitive advantage lies in being able to respond quickly to the environment. This capability requires top managers to allocate

company resources rapidly to introduce competitive products into highly dynamic markets. Additionally, managers should be capable of quickly reinventing products and services in response to competitors. Managers must also be able to make correct decisions rapidly based on incomplete IT in order to promote long-term firm development. Under these conditions, granting managers greater discretion and making sure they are well aware that this can help them utilize fully the resources at their disposal to make correct decisions that affect long-term firm development. This situation also provides managers with strong motivation to work hard toward the goal of realizing their ambitions.

On the other hand, when competition in the industry is weak, the competitive pressure on the companies and managers is generally low. Under such circumstances, high perceived managerial discretion might lead to self-exaggeration through abuse of power – for example, the private use of company resources. Managers may use this discretion for personal gain, negatively impacting on the firm's long-term performance. In this situation, firms should strengthen control over managerial discretion, to ensure that top managers work hard to realize company goals. By ensuring managers perceive the managerial discretion available to them accurately; firms are more likely to achieve better business performance.

The significance of implementing diversification can be seen through potential increase of firm performance or through managerial motives to diversify (an increase in compensations). Motives for the implementation of the diversification strategy are numerous and vary from company to company. Existing research has identified several common motives for the diversification strategy, such as firm growth, survival of the company, risks reduce and increase in profitability, depending on the type of diversification (related or unrelated) they are implementing.

Effective implementation of diversification may possibly increase firm value. However, diversification should be under the control of internal corporate governance mechanisms in order to avoid or minimize the potential costs that implementation can bring, as well as any intentions of managers for excessive diversification.

The competitiveness of the firm could be improved through implementation of diversification, however the level to which they will diversify its resources, especially financial, as well as key competencies and the opportunities and threats within the institutional environment in which they operate need to be properly determined.

This paper examined the difference the types of diversification the firm is pursuing to grow and the ways of implementing this growth strategy in relation to industries in which firm operates. Results showed there is a different frequency of implementing related under unrelated diversification strategy among different industries in large Croatian firms and this could be partially explained through different characteristics of particular industry in which the firm operates (the level of rivalry in the industry, high entry barriers, higher transaction costs, volatility of individual industries, etc).

## LITERATURE

1. Amihud, Y. and Lev, B. (1981) Risk Reduction as a Managerial Motive for Conglomerate Mergers, *Bell Journal of Economics*, 12, pp. 607-617.
2. Barney, J. and Hesterly, W. (2006) Strategic management and Corporate Advantage. Pearson Education Inc.
3. Besanko, D., Dranove, D., Shanley, M. and Schaefer, S. (2007) Economics of Strategy. 4<sup>th</sup> edition. Massachusetts: John Wiley & Sons, Inc.

4. Bliss, R. and Rosen, R. (2001) CEO Compensation and Bank Mergers, *Journal of Financial Economics*, 61, pp. 107-138.
5. Combs, J. G. and Skill, M. S. (2003) Managerialist and human capital explanation for key executive pay premiums: A contingency perspective, *Academy of Management Journal*, 46, pp. 63-73.
6. Coulter, M. (2002) *Management in Action*. Upper Saddle River, NJ: Prentice Hall.
7. Daraboš, M. (2011) Diversification strategy in large companies (in Croatian). Masters thesis. Ekonomski fakultet: Zagreb.
8. Daraboš, M. (2011) Diversification strategy across industries: Empirical Evidence of Croatia, *Proceedings of the International Conference on Entrepreneurship, Education, Innovations, Maribor, Slovenia: University of Maribor, Faculty of Economics and Business*, pp. 324-337.
9. Daraboš, M. ((2014) The link between managerial discretion and firms' growth strategy, *Proceedings of the 5<sup>th</sup> International Scientific Conference on Economic and Social Development and 2<sup>nd</sup> Eastern European esd-Conference on Social Responsibility Belgrade, 10-11 April, 2014*.
10. Duane Ireland, D. R., Hoskisson, R. E. and Hitt, M. A. (2009) *The Management of Strategy Concepts & Cases*. Mason: South – Western Learning, pp. 157.
11. Finkelstein, S. and Boyd, B.K. (1998), How much does the CEO matter? The role of managerial discretion in the setting of CEO compensation, *Academy of Management Journal*, 41 (2), pp. 179-99.
12. Finkelstein, S. and Hambrick, D. C. (1990) Top-management-team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly*, 35(3), 484-503.
13. Gray, S. R. and Cannella, A. A. Jr. (1997) The role of risk in executive compensation, *Journal of Management*, 23, pp. 517-540.
14. Halebian, J. and Finkelstein, S. (1993). Top management team size, CEO dominance, and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Journal*, 36(4), 844.
15. Hambrick, D.C. and Finkelstein, S. (1987) Managerial discretion: a bridge between polar views of organizations, *Research in Organizational Behavior*, 9, pp. 369-406.
16. Harrison, S. J. and St. John, C. H. (2008) *Foundations in Strategic Management*. 4th edition, Mason: Thompson South-West.
17. Janney, J. J. (2002) Eat or get eaten? How equity ownership and diversification shape CEO risk-taking, *Academy of Management Executive*, 14 (4), pp. 157-158.
18. Jensen, M. C. (1989) The Eclipse of the Public Corporation, *Harvard Business Review*, September-October, pp. 61-74.
19. Magnan, M. L. and St-Onge, S. (1997) Bank performance and executive compensation: A managerial discretion perspective, *Strategic Management Journal*, 18(7), 573-581.
20. Manne, H. G. (1965) Managers and Market for Corporate Control, *Journal of Political Economy*, 73, pp. 100-120.
21. Palmer, J. P. (1973) The profit–performance effects of the separation of ownership from control in large U.S. industrial corporations, *Bell Journal of Economics and Management Science*, 4, 293–303.
22. Peterson, S. (1965) Corporate control and capitalism, *Quarterly Journal of Economics*, 79, 1–24.
23. Shen, W. and Cho, T. S. (2005) Exploring involuntary executive turnover through a managerial discretion framework, *Academy of Management Review*, 30(4), 843-854.
24. Sudarsanam, S. (2005) *Creating Value from Mergers and Acquisitions*. London: Prentice Hall International Limited.

25. Tipurić, D., ed. (2008) Korporativno upravljanje. Zagreb: Sinergija nakladništvo d.o.o.
26. Tipurić, D., Daraboš, M. (2012) The Frequency of Implementing Diversification Strategy in Croatia, *The Business Review Cambridge*, Vol. 19, No. 2, pp. 129-135.
27. Werin, L. and Wijkander, H. (1992) Contracts Economics. Cambridge: MA Blackwell.
28. Graham, J., Lemmon, M. and Wolf, J. (2002) Does corporate diversification destroy value?, *Journal of Finance*, Vol. 57, No. 2, pp. 695-720.

## THE PROCESSES OF GLOBALIZATION FOR EMERGING MARKETS AND GROWTH PROSPECTS

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### **ABSTRACT**

*In modern day markets the processes of globalization are remarkably intense. This is one of the key characteristic traits of one particular market category - emerging markets, which are characterized by their rapid economic growth. In this globalization environment they are faced with new challenges for finding economic growth. In this line of thought, the goal of this paper is to shed light on the implications globalization has on emerging markets and to provide a practical solutions for their future economic growth. The subjects of this paper are the globalization processes in emerging markets and the obstacles emerging markets face in their economic growth.*

*The task at hand is to present globalization in its current shape – the processes of globalization are interlinked with the macroeconomic conditions necessary for emerging market growth. Additionally, we are observing a globalization which is associated with the rapid expansion of world trade and the larger inflows from direct investment. Secondly, globalization in its present shape leads to restructuring in many companies. In conclusion, the goal of this article is to show that the key to economic growth in emerging markets are technological adaptation, institutional reform and financial independence.*

**Keywords:** *emerging markets, globalization, growth*

### **1. INTRODUCTION**

In the traditional appreciations for the globalization in the world economy a great value is placed on the view that it is a continuation of the process of internationalization and liberalization, whereby limitations are being eliminated with the aim of a more open economy. These processes of globalization are being associated with a general universalization or a planetary synthesis, deterritorialisation or an erasure of national borders, a creation of supranational institutions and connections and not least a modernization of the economic life. Processes such as: eliminating the limitations that the world trade faces, the transition towards a market economy, the processes, connected with the industrialization, the economic growth, the integration of the global financial markets, the technological progress, etc. are becoming motive powers for the economic globalization.

Today the globalization is no less an important process in comparison with that of previous years and its development attains more specific manifestations for a category of economies, called emerging economies or emerging markets, the main characteristic of which is the accelerated economic growth.

### **2. GLOBALIZATION TODAY FOR THE EMERGING MARKETS**

Influenced by globalization, emerging markets attain a specific aspect and face new challenges for their growth. *Firstly, it is characteristic that these processes are being associated with a formation of the necessary macro-economic conditions for the development of the emerging markets.* The operation of mechanisms, that to a large extent accelerate the evolution, is observed within the national economies of the emerging markets. We are talking about an



increasing liberalization and deregulation of the economy, a stabilization of the national currency, accelerated privatization programmes, a liberalization of the policy towards the international trade and their attractiveness as a destination for export, for foreign direct investment and outsourcing. The macroeconomic policies are being aimed towards the creation of conditions for a quickly growing standard of living and an increasing prosperity.

*Secondly we observe a globalization, which we associate with strong dynamics in the development of the international trade and the direct investment flows.* The international trade for emerging markets has as its source low expenditure for resources, but also a medium for operation, which creates highly capable companies for scientific and development work with high capabilities for competing within the world economy. The market of the emerging economies is quickly growing, and in some countries it is becoming very large and open. These economies are quickly increasing the intensity of the tangible and intangible flows, running across borders. In a tangible aspect the whole aggregate of goods, services, capital jumps over the national boundaries and as a result of this the business conditions and management processes and technologies are being changed. In an intangible aspect the flows of globalization are being expressed by a change in the corporate and business practices, both for the existing market participants and for the new ones, and for the ones that are subject in one form or another to the transnational companies that are affecting the local conditions. Thus the intangible flows of foreign direct investment are increasingly taking the shape of management methods on a supranational corporate level and have an intensively increasing nature.

*Thirdly, a globalization which leads to transformational processes and specifically to qualitative and quantitative alterations in the companies and the ongoing processes of restructurisation.* The dynamic dimensions of the foreign direct investment in the emerging markets are very often associated with transformations for the local companies. In principle new management methods and techniques are being adopted, and when they are a result of an acquisition or a merger and there is control over the companies there is also a restructuring. Usually for the emerging markets this means reviewing and restructuring the working assets with the aim of achieving higher revenues and profits. This means a complete revaluation of the productivity of the labour input and the capital resources in comparison with analogous companies throughout the world. When significant differences, and in a negative aspect at that, are found for the companies from the emerging economies, measures are taken under the influence of the management of the transnational companies towards the adoption of new business models, segmentation of the activities, offshoring, outsourcing, etc.

*Fourthly – the side effects observed in the global economy.* The objective development of the globalization for the emerging markets creates prerequisites for changing the course of flows and processes, which contributes to the growth. We are talking about the adoption of brands, related to the research and development work on a global scale /as is the case e.g. with the Chinese Hisense/, the affiliation of the research engineering to the global innovations /the Hong Kong company Johsor Electric/, the introduction of new business models and strategies towards a multitude of markets and their acquisition /as is the case with the Mexican conglomeration Cemex/, generating revenue from development and scientific work in the sphere of natural resources /as is with the Brazilian Sadia and Perdagio/ and others<sup>54</sup>.

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<sup>54</sup> For more information See.: Cavusgil S. Tamer, Rammal Hussain G. , Freeman Susan - „International Business Australasian edition: the new realities“, Pearson Australia, 2011, pp. 260-266

### **3. OBJECTIVE STATE FOR THE GROWTH OF THE EMERGING MARKETS IN CONDITIONS AFTER THE GLOBAL CRISIS**

After the beginning of the financial crisis and at the height of the global economic and financial recession a large part of the economies throughout the world were confronted with serious problems, which had an impact on their economic growth. In contrast, in the economies of the countries from the group of the so called emerging markets the same manifestations of the global crisis were not observed. On the one hand they continued with the positive trend in their development, but at the same time this given impression was also strongly influenced by the objectively setting in globalization processes. This trend reveals several very important facts: in the first place, that the emerging markets displayed an enhanced growth /above the potential/ and towards the middle of the year 2015 they present half of the aggregate production in the world. After the economic difficulties of the 80s and 90s of the 20<sup>th</sup> century, beginning with the debt crisis in Latin America from the beginning of the 80s and continuing with the Asian crisis of the 90s, since the year 2000 there is a strong and stable growth, amounting up to 4% annually in the period from 2000 to 2013. The economic growth for the emerging markets is currently representing a wide basis for almost half of the global production by purchasing power parity.

In the second place, that the existing favourable external conditions, along with the improved political frameworks are playing an important part for a movement towards economic growth. During the period 2000-2013, with the exception of the short term decrease in the years of the global financial crisis, the emerging markets have profited from several things: from the growing global trade, easy funding conditions, driven by low interest rates in the developed economies, and high and increasing prices of raw materials. These favourable conditions, combined with the trade and the financial liberalization facilitate the capital flows and investments, which leads to a greater productivity. In addition to this many emerging markets utilized the opportunity to introduce structural reforms, to reduce their vulnerability, to increase their certainty with international reserves and to approach more flexible exchange-rate regimes.

In the third place, that with the high productivity growth there is also a leap in the convergence. By utilizing the production function approach for decomposing growth, a greater total factor productivity is discovered. This explains the 1.75% higher growth on the average in the emerging markets during the last ten years, in comparison with the 90s – 1.5%. In fact, the increasing of the total factor productivity positively influences the emerging markets in all regions during the last decade after the aforementioned downturn in Latin America, The Middle East and North Africa. Notwithstanding the increasing productivity, the accumulation of factors remains the main motive power for the growth of the emerging markets in recent years. To this the conditions for the growth of trade and those for easy funding, which facilitate investments and capital formation, are added as well.

In the fourth place, that the favourable external conditions for the emerging markets are among the reasons, explaining half of the leap in growth. In IMF studies, in which models for long term regressions of growth are being used, the historical influence of external factors for growth is very precisely assessed.<sup>55</sup> Generally speaking owing to these models it is being discovered that the external demand /facilitated by the increasing liberalization/, lower interest rates on a global scale, as well as the high prices of raw materials represent approximately half of the increase in the growth of the emerging markets during the 2000s in comparison with the 1990s.

In the fifth place, that the external demand is an important factor for increasing the growth, particularly in those economies that are more open. The expanding volumes of trade throughout the world, combined with a further trade liberalization pushes the growth to the not

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<sup>55</sup> For more information, see: Cubeddu Luis and others, IMF staff discussion paper, Emerging markets in Transition: Growth prospects and Challenges, June 2014, p.6

so oriented towards export of raw materials emerging markets. Naturally their share is increasing with the country's openness towards trade. The high sensitivity of the growth in this sense is found regarding both the developed countries and the emerging markets.

In the sixth place, that the facilitated funding and conditions lead to an increase in the investments and growth in the financially open emerging markets. The lower interest rates, as well as the more stringent conditions for borrowing on a global scale contributed to an increase in the internal demand in the emerging markets. This dependency is particularly strong in the more financially open economies.

In the seventh place, that the performance of emerging markets after the global crisis is influenced by how well have they managed the challenges. Concretely we are talking about how many were the allowed before the crisis financial and external imbalances. Those of the emerging markets, which entered the crisis with excessively large account deficits also needed more time for recovery respectively. Countries that had less of a pro-cyclical policy after the financial crisis were in a position to utilize their policy and to recover quicker.

#### **4. CHALLENGES CONFRONTING THE GROWTH /MEDIUM TERM PERSPECTIVES/**

After the beginning of the global crisis both the developed economies and the emerging markets were confronted with problems, which would take long years to solve. Taking into account the factors that objectively determine the growth in the emerging markets would to a large extent help assess its condition. Furthermore, it is necessary new sources to be found in order to guarantee it and to increase the level of welfare. Taking into account the new challenges of the globalization, the driving forces in a medium term perspective can be sought in:

##### **4.1. The possibility of technological adaptation**

The economic downturn in the global economy highlighted the introduction of key technologies such as the cloud technologies and the social media for example. These changes transform branches and lead to the formation of a new wave in the creation of the tangible goods, and this is exceptionally strong in the emerging markets. The companies from the emerging markets, having substantial financial resources at their disposal, actively invest in technologies, display a greater willingness to introduce new digital technologies, in comparison with analogous companies from the rest of the world. For the emerging markets for example the possibility for totally new working methods in the information technologies involves 500 million new consumers, as opposed to those in the USA, who amount to only 15 million.

The universally accepted index ICT (information and communications technology), which has been elaborated by the International Telecommunication Union – ITU of the UN, can be utilized for assessing the technological adaptability. It includes eleven indicators and provides the possibility to assess factors such as access to the internet, mobile and digital networks, using knowledge and skills in the informational environment and others. According to the data for the emerging markets their potential as an information society is rapidly growing, as are the successes in its profound adoption within the countries<sup>56</sup>.

##### **4.2. The reforms in the institutions**

In principle the institutional environment is the one which contains the legal and administrative systems, within the frameworks of which all economic agents interact. For the emerging markets the improvement of the institutional quality allows the avoiding of traps, which are a result of the median income that has always been of a great importance. Firstly, the legislative acts are aimed mainly at perfecting the institutions, so a stagnation or downturn in the growth of some of the emerging markets means discontinued structural reforms.

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<sup>56</sup> <http://www.itu.int/en/newsroom/Pages/wtis14-mis-images.aspx>

Furthermore, the state plays a sufficiently strong role in the economy of the countries from the group of the emerging markets. In a period of crisis the economic role of the state in some economies expands further, so such effects are unlikely to disappear in a medium term perspective. The reforms in the institutions as a factor can be represented in qualitative terms through the property rights and their guaranteeing by the state. In a Heritage Foundation study of the International Property Rights Index on a scale of 0 to 100, where the higher results represent a more active protection of the property rights, from 122 countries 24 display an improvement in the results, with 51 the situation has not changed and 47 display a change for the worse. For the greater part of the emerging markets this index has deteriorated or has remained unchanged. This may also signify a potential problem for ensuring their economic growth in the future.

#### **4.3. The dependency on raw materials**

The sharp increase in the prices of raw materials during the last decade had a livening effect on a large part of the emerging market economies. For the period 2003-2008 the oil prices expressed in US dollars for example have increased by 33%, the dynamics of the prices of metals and mineral resources have been analogous. Naturally that increase in the prices of many of the key resource commodities for the emerging markets led to an improvement in the trading conditions. This in turn also led to a GDP growth. In a medium term perspective and in the near decade the tendency towards an increase in the prices of raw materials is unlikely to recur, especially if amplitude and duration are being compared. Furthermore, the increase in demand during the last decade was in effect to a certain extent a result of the balanced development of China as well. And insofar the economic growth of China is slowing down and at the same time is also becoming more balanced, the increase in China's demand for raw material commodities would slow down.

What is also worth noting is the fact that if judging by the long term tendencies the influence of the main factors that determine the demand for raw materials is beginning to weaken, as is the case with the decrease of the global growth of income and the slowing down of the pace of population growth. According to prognoses of the UN, in the next fifteen-twenty years the growth of the world population will slow down significantly. If in the 2000s it was 1.2%, up to the year 2030 it would amount to 0.8%.

The change in the structure of the GDP could also slow down the increase in the demand for raw materials, insofar the world's services sector is growing faster than the resource-intensive and processing industry. Last but not least – there is an effect that is hard to predict, namely the changes in technology. It is known that the latter are directly linked to the intensity of the resources used in the manufacturing process. For the emerging market economies, with the exception of China, the intensity of the usage of raw materials quickly decreases.

#### **4.4. Financial freedom**

The financial and economic crisis had a negative effect on the level of financial freedom. For the countries from the group of the emerging markets, if we agree with the classification which includes 126 countries, according to which the Heritage Foundation's index of the financial freedom, conditions are difficult – only 22 countries have improved their position, 36 have worsened it, and 68 have remained unchanged<sup>57</sup>. That is why a development of the financial sector in the emerging markets, as a prospect with the aim of overcoming the most urgent and serious financial problems, could be expected. The banking sector as a part of the financial sector, for example, holds a dominant position in the structure of the financial intermediation. Although some of the banks in this type of economies belong to the state, which allocates the capital often and in an irrational manner, there is a huge potential for development for this sector. So, the perspectives for development of the financial freedom in a medium term

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<sup>57</sup> 2015 Index of Economic Freedom, Country ranking in <http://www.heritage.org/index/ranking>

aspect are very high, provided of course that the state non-intervention in the functioning of the financial system is overcome and that more market principles and less regulative ones are introduced.

#### **4.5. The credit ratings that are being provided**

The global finances and the quality of the provided credit ratings were the things that the global financial crisis affected the most, with developed economies being hit the hardest. In 2010 alone, for example, the ratings of 18 developed countries were downgraded, without being upgraded in the following years, a result mainly of government debts, increased by 80%. The necessity of internationally recognized credit ratings along with the advance of the globalization of the financial flows and the widening of the speculative trading require more and more thought about level of profitability and concomitant risk.

In contrast with the developed countries, those with emerging markets constituted that same year 50 cases of upgrading of the ratings and only 11 cases of downgrading. Insofar the condition of state finances in the emerging markets was much more adequate before the beginning of the financial crisis, their tax and budget measures turned out to be more effective as well. As a result these countries survived relatively seamlessly the global financial crisis too. Looking forward, the issues that still need to be resolved are raising the independent credit assessment.

### **5. CONCLUSION**

Today the global economy is developing in conditions of globalization, in a contemporary version of a manifestation of processes of internationalization and liberalization, elimination of limitations with the aim of a more open economy, erasure of national borders, and creation of supranational institutions and connections. To the motive powers for the economic globalization - eliminating the limitations that the world trade faces, the industrialization, the economic growth, the integration of the global financial markets, the technological progress etc. new ones are also being added, characteristic of the dynamics of the 21<sup>st</sup> century. The globalization is becoming an ever more important process in comparison with that of previous years and its development attains specific manifestations for the emerging markets, the main characteristic of which is the accelerated economic growth. Influenced by it, they attain a specific aspect and face new challenges for their growth. These challenges we associate with the formation of the necessary macroeconomical conditions for the development of the emerging markets with strong dynamics in the development of the international trade and the direct investment flows, transformational processes with the qualitative and quantitative alterations in the companies and the ongoing processes of restructurisation, the side effects observed in the global economy, etc. In these conditions after the beginning of the financial crisis and at the height of the global economic and financial recession a large part of the developed countries were confronted with serious problems, which had an impact on their economic growth. In contrast, in the emerging markets the same manifestations of the global crisis were not observed. On the one hand they continued with the positive trend in the development of their economies, but at the same time this given impression was also influenced by the objectively setting in globalization changes. This trend reveals in the first place the fact, that the emerging markets displayed an enhanced growth, secondly, that the existing favourable external conditions, along with the improved political frameworks are playing an important part for the movement towards economic growth, thirdly, that with the high productivity growth there is also a leap in the convergence, fourthly, that the favourable external conditions for the emerging markets are among the reasons, explaining half of the leap in growth, fifthly, that the external demand is an important factor for increasing the growth, particularly in those economies that are more open, sixthly, that the facilitated funding and conditions lead to an increase in the investments, and seventhly, that the performance of emerging markets after the

global crisis is influenced by how well have they managed the financial challenges. It is possible to render an account of the fact that after the beginning of the global crisis the Emerging markets are confronted with problems, which would take long years to solve. Taking into account a large portion of the factors that objectively determine the growth in the emerging markets is one of the two parts of the solution to the problem of growth. The other part lies in the necessity to find new sources in order to guarantee it and to increase the level of welfare. Taking into account the new challenges of the globalization, the driving Forces in a medium term perspective can be sought in the possibility of technological adaptation, the reforms in the institutions, the dependency on raw materials, the financial freedom, the reliable credit ratings that are being provided, etc. In this aspect for the emerging markets the future carries potential for the economic growth.

## LITERATURE

1. Cavusgil S. Tamer, Rammal Hussain G. , Freeman Susan, 2011, Pearson Australia „International Business Australasian edition: the new realities“, Pearson Australa, pp. 260-266
2. Cubeddu Luis and others, IMF staff discussion paper, June 2014, “Emerging markets in Transition: Growth prospects and Challenges” p.6
3. International Monetary Fund, 2011a. Recent experiences in managing capital inflow- Cross-cutting themes and possible guidelines. IMF paper, February
4. MIS 2014 Report Charts and Images from <http://www.itu.int/en/newsroom/Pages/wtis14-mis-images.aspx>
5. 2015 Index of Economic Freedom, Country ranking from <http://www.heritage.org/index/ranking>

## DID THE PRIVATE EQUITY AND VENTURE CAPITAL MARKET IN CEE RECOVERED AFTER THE FINANCIAL CRISIS? CASE OF POLAND, HUNGARY AND CZECH REPUBLIC

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### **ABSTRACT**

*Private equity (PE) and venture capital (VC) investments are very important for innovation and economic growth. Private equity is a form of equity investment into private companies not listed on the stock exchange, while venture capital is a type of private equity focused on start-up companies.*

*During the last few years the focus of PE/VC investments has moved from traditional and mature PE/VC markets to emerging markets. Significant diversity exists in PE activity between countries in Europe, particularly between Western countries and countries in Central and Eastern Europe (CEE) as well as within CEE countries.*

*The European PE market in 2009 was seriously affected by the financial crisis, while the CEE region was affected a year later. Before the financial crisis, the PE/VC markets of Poland, Hungary and Czech Republic, looking in terms of total investments, were the most attractive ones compared to other PE/VC markets in Central and Eastern Europe (CEE).*

*The goal of this paper is to examine whether the PE and VC market in CEE has recovered, and whether the importance of individual PE/VC markets remained unchanged. The research is both qualitative and quantitative, and involves an identification, analysis and comparison of PE/VC investments data for selected countries. The time frame for this research is between 2008 and 2014. The total volume of investments per year and the ratio of PE investments to the gross domestic product (GDP) are used to demonstrate the recovery of the PE market. The data necessary for the current research were taken from the public available yearbook of EVCA/PEREP Analytics for 2015 and EVCA special paper – Central and Eastern Europe Statistics 2014. „PEREP Analytics” is a centralised, non-commercial pan-European private equity database. The „PEREP Analytics” statistics platform monitors the development of private equity and venture capital in 25 European countries.*

**Keywords:** CEE, Financial crisis, Private equity, Venture capital

### **1. INTRODUCTION**

Private equity (PE) and Venture capital (VC) are primarily considered as an American, and relatively new phenomenon, which spreads in Europe and Asia (Lerner et al., 2012, p. 2-7). Today, PE and VC investments represent an international business and they are very important for current economy (Block and Sandner, 2009, p. 308) through widely documented positive effects on economic development, entrepreneurship and innovation (Bernoth et al., 2010, p. 2). Private equity is a form of equity investment into private companies not listed on the stock exchange, while venture capital is a type of private equity focused on start-up companies (EVCA, 2015).

The PE/VC market in CEE is relatively small in comparison to the whole European PE/VC market. However, in the last few decades the maturation of the market is visible and it generated higher returns compared to the Western Europe (Széles et al., 2011, p. 273). According to KPMG (2014, p. 13) the attractiveness of the CEE region for private equity investors is driven by:

- the integration of many of its countries with the EU,
- harmonisation of legal standards and

- close multi-faceted collaboration with western countries.

According to Groh et al. (2008, p. 2) the most attractive CEE countries for PE and VC investments are Poland, Hungary and Czech Republic. Furthermore, according to data from 2008, those three countries individually attracted the most of PE and VC investments in CEE region (Šimić, 2015, p. 279). Poland is the largest economy in the CEE, with a good development of capital market (with stable and modern banking system) and good institutional framework for PE investors and what makes Poland first choices for PE investors in CEE (KPMG, 2014, p. 3).

The Hungarian PE/VC market is “determined by its competitive position in Europe and in particular primarily in the CEE region” and its development “will significantly depend on the extent of which the steps of the government’s economic policy can reduce the macroeconomic uncertainties and uncertainties in the capital markets” (Karsai, 2011, p. 5-6).

According to Ptacek (2014, p. 59), in Czech Republic exists an equity gap on VC market because the VC market is concentrate on large later-stage investmets while the early-stage VC investments are rare. Reasons for this gap are as follows:

- The law restricts the participation of pension fund and insurance companies as limited partners in PE/VC activities,
- The willingness of sharing business with external investors by entrepreneurs is lacking,
- Entrepreneurs do not have enough management knowledge.

During the last few decades, private equity and venture capital funds are an essential segment of the global financial system (Bethlen, 2012, p. 1, Széles et al., 2011, p. 274). The effects of the financial crisis which began in 2007 and became actual on 15 September 2008 when Lehmann Brothers collapsed (Allen and Moessner, 2012, p. 124, Birdsall, 2012, p. 1, Allen and Carletti, 2009, p. 3) are still aggregated.

The goal of this paper is to examine whether the PE and VC market in CEE has recovered, and whether the importance of individual PE/VC markets remained unchanged. The research is both qualitative and quantitative and involves an identification, analysis and comparison of PE/VC investments data for selected countries. The time frame for this research is between 2008 and 2014. The total volume of investments per year and the ratio of PE investments to the gross domestic product (GDP) are used to demonstrate the recovery of the PE market. The data necessary for the current research were taken from the public available yearbook of EVCA/PEREP Analytics for 2015 and EVCA special paper – Central and Eastern Europe Statistics 2014. „PEREP Analytics” is a centralised, non-commercial pan-European private equity database. The „PEREP Analytics” statistics platform monitors the development of private equity and venture capital in 25 European countries.

## **2. PRIVATE EQUITY AND VENTURE CAPITAL IN CENTRAL EASTERN EUROPE**

PE and VC is not easy to define because different authors have different definitions, i.e. one of the most confusing things about private equity is terminology (Lerner et al., 2012, p. 2).

Private equity is a form of equity investment into private companies not listed on the stock exchange, while venture capital is a type of private equity focused on start-up companies (EVCA, 2015). According to the Hungarian, Polish and Czech Private Equity and Venture Capital Association (Table 1) there is no difference in the definition of Private Equity. Private equity represents an equity investment into companies which are private companies, i.e. they are not on an exchange market. It can be used for developing new products, technologies, resolving management or owner’s issues and etc. Venture capital is considered as a subset of private equity and is primarily focused on financing launch, early development, or expansion of a business.



*Table 1: Definition of private equity/ venture capital* (authors own compilation according to different sources)

Author	Definition of private equity/ venture capital
European Private Equity & Venture Capital Association (EVCA, 2015)	<p>Private equity is a form of equity investment into private companies not listed on the stock exchange. It is a medium to long-term investment, characterised by active ownership. Private equity builds better businesses by strengthening management expertise, delivering operational improvements and helping companies to access new markets.</p> <p>Venture capital is a type of private equity focused on start-up companies. Venture capital funds back entrepreneurs with innovative ideas for a product or service who need investment and expert help in growing their companies.</p>
Hungarian Private Equity and Venture Capital Association (HVCA, 2015)	<p>Private equity provides equity capital to enterprises not quoted on a stock market. Private equity can be used to develop new products and technologies (also called venture capital), to expand working capital, to make acquisitions, or to strengthen a company's balance sheet. It can also resolve ownership and management issues. A succession in family-owned companies, or the buyout and buyin of a business by experienced managers may be achieved by using private equity funding.</p> <p>Professional equity co-invested with the entrepreneur to fund an early-stage (seed and start-up) or expansion venture. Offsetting the high risk the investor takes is the expectation of higher than average return on the investment.</p> <p>Venture capital is a subset of private equity.</p>
Polish Private Equity and Venture Capital Association (PSIK, 2015)	<p>Private equity provides equity capital to enterprises not quoted on any stock market. Private equity can be used to develop new products and technologies, to expand working capital, to make acquisitions, or to strengthen a company's balance sheet. It can also resolve ownership and management issues, such as succession in family-owned companies, or the buyout/buy-in of a business by experienced managers.</p> <p>Venture capital is, strictly speaking, a subset of private equity and refers to equity investments made for the launch, early development, or expansion of a business.</p>
Czech Private Equity and Venture Capital Association (CVCA, 2015)	<p>Private equity refers to medium- to long-term financing provided in exchange for acquiring a stake in the owners' equity of enterprises whose shares are not traded on any stock exchange. Funds are invested into companies that have potential for creating value and increasing their market share and whose business plan aims to produce and offer a highly innovative product, process or technology. Private equity itself comprises both purchases of companies by company management (buyouts) or by external managements (buy-in) as well as venture capital, i.e. the capital invested in a company's seed, start-up and later growth stages.</p> <p>Venture capital is understood as medium- to long-term capital invested in the form of an equity stake in a company.</p>

During the last few years the focus of PE and VC investments has moved from traditional and mature PE/VC markets to emerging markets. The PE/VC market in CEE is relatively small in comparison to the whole European PE/VC market. It is concentrated in larger countries and has different importance among these countries (Lazarevski et al., 2012, p. 1-2). However, in the last few decades the maturation of the market is visible and it generates higher returns compared to the Western Europe (Széles et al., 2011, p. 273).

In the CEE the PE industry „trend is fragmented from country to country“ (Lazarevski et al., 2012, p. 5). Poland is the largest economy in the CEE, with a good development of capital market (with stable and modern banking system) and good institutional framework for PE investors and all this makes Poland first choices for PE investors in CEE (KPMG, 2014, p. 3). The Hungarian PE/VC market is “determined by its competitive position in Europe and in particular primarily in the CEE region” and its development “will significantly depend on the extent of which the steps of the government’s economic policy can reduce the macroeconomic uncertainties and uncertainties in the capital markets” (Karsai, 2011, p. 5-6).

According to Ptacek (2014, p. 59), in Czech Republic exists an equity gap on VC market because the VC market is concentrated on large later-stage investments while the early-stage VC investments are rare. Reasons for this gap are as follows:

- The law restricts the participation of pension fund and insurance companies as limited partners in PE/VC activities,
- The willingness of sharing business with external investors by entrepreneurs is lacking,
- Entrepreneurs do not have enough management knowledge.

According to Groh et al. (2008, p. 2), the most attractive CEE countries for PE and VC investments are Poland, Hungary and Czech Republic. Furthermore, according to data from 2008, (the pre-crisis period), these three countries individually attracted the most of PE and VC investments in CEE region (Šimić, 2015, p. 279).

### 3. THE FINANCIAL CRISIS

The financial crisis began in 2007 and became actual on 15 September 2008 when Lehmann Brothers collapsed (Allen and Moessner, 2012, p. 124, Birdsall, 2012, p. 1, Allen and Carletti, 2009, p. 3, Block et al., 2010, p. 2, Block and Sandner, 2009, p. 295). After the Great Depression in 1930 this crisis is considered as the worst one (Block et al., 2010, p. 1).

According to Allen and Carletti (2009, p. 6), the real reason which caused the crisis were the blowing of the real estate bubble in the U.S., while Block et al. (2010, p. 3) highlight also the supreme crisis, deregulation of the financial markets and the creation of different financial innovations. Due to the securitization of mortgages, primarily sub-prime mortgages in the U.S., the crisis spilled over to the rest of the world and caused the decline in the whole world economy – drop of GDP, raising unemployment, company bankruptcies, reduction of incomes of millions of people, fear of future etc. (Allen and Carletti, 2009, p. 9, Letica, 2010, p. 1, Rani and Torres, 2011, p. 1).

The economies of Central and Eastern Europe countries were affected with the crisis from 2008. In different countries of CEE the crisis began and lasted differently. The Figure1 shows the beginning and end of the crisis for certain CEE countries (Poland, Bulgaria, Hungary, Romania and Czech Republic) according to the real GDP.

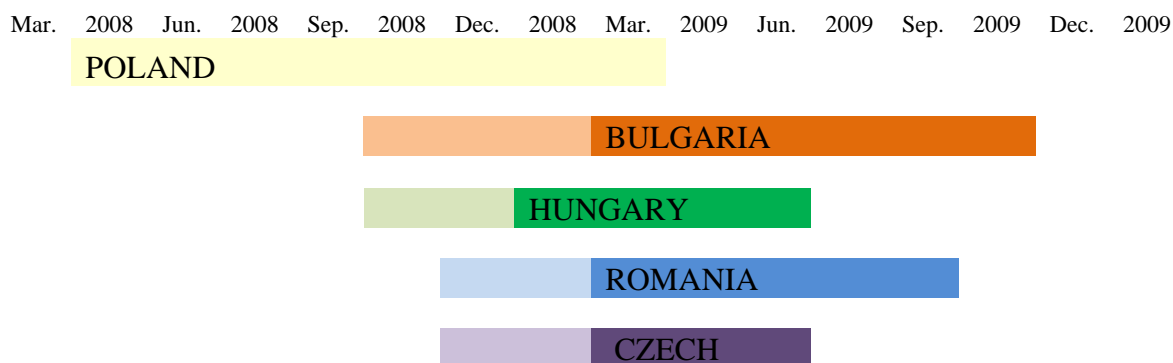


Figure 1: The crisis in Poland, Bulgaria, Hungary, Romania and Czech Republic (Gibescu, 2010, p. 229)

According to Gibescu (2010, p. 229), considering those five countries only Poland did not have an economic recession (just only a decrease in the GDP rate), Czech Republic was shortest and Bulgaria longest affected by the crisis.

The European PE market in 2009 was seriously affected by the financial crisis, while the CEE region was affected a year later (Ptacek, 2014, p. 61 - 62). The effects of the crisis on the PE market are so drastic that the possibility of recovery is not expected within this decade (Ptacek, 2014, p. 61). According to Block et al. (2010, p. 5, 11) the financial crisis affected the venture capital market in the following ways: a decrease in the number of funding rounds; a decrease in the amount of funds raised per funding as a result of a decrease in the supply of money to VC funds; and a decrease in the valuation of VC-backed start-ups. Cumming and Johan (2012, p. 1) pointed out how "the recent financial crisis cannot totally be blamed for the marked drops in venture capital fundraising, reduced venture investment and the hindrance of successful exits around the world, but it may have exacerbated the existing problems".

#### 4. METHODOLOGY

The research is both qualitative and quantitative and involves an identification, analysis and comparison of PE and VC investments data for selected countries in the period from 2008 to 2014. The goal is to show if the PE and VC market in CEE has recovered, i.e. it has reached the values of investments before the crisis and whether the importance of individual PE/VC markets remained unchanged. For CEE the year of 2009 will be taken as a pre – crisis year, while for Europe it is 2008. The total volume of investments per year and the ratio of PE investments to the gross domestic product (GDP) will be used to demonstrate the recovery of the PE market. Figures are used to visualize the time series and trends in observed variables.

The data necessary for the current research were taken from the public available yearbook of EVCA/*PEREP Analytics* for 2015, EVCA special paper – Central and Eastern Europe Statistics 2014. „*PEREP Analytics*” is a centralised, non-commercial pan-European private equity database. The „*PEREP Analytics*” statistics platform monitors the development of private equity and venture capital in 25 European countries. Collected data were processed using descriptive statistics.

#### 5. RESULTS

##### 5.1. Descriptive statistics for PE investments in CEE region 2008 – 2014

From the period 2008 to 2014 the total PE/VC investment in CEE (Chart 1) have been decreasing, except for 2014. In the observed period the decreasing of PE/VC investment for CEE starts in 2010, while for Europe it was in 2009 (Chart 2) which is pursuant with previously presented theory. The start of the PE/VC investments recovery in CEE can be seen in 2014.

According to EVCA (2015a, p. 3), “ the 2014 CEE figures include many encouraging signs, including the first €1bn enterprise value private equity deal in the region since 2009 and a record number of 290 businesses receiving private equity and venture capital funding. 2014 was the fourth best year for fundraising and the second best year for divestments in CEE recorded history. It also saw major new investments in the region, not only by CEE-based fund managers, but also by leading global private equity houses.” However, it is necessary to point out how the total PE/VC investment in CEE for 2014 compared to the pre – crisis year is at level of 53,91% while for EU the ratio is at 77,78%. This result shows how the PE/VC investments in CEE compared to EU are recovering slowly and that the PE/VC market is still far from the level of investment in 2009.

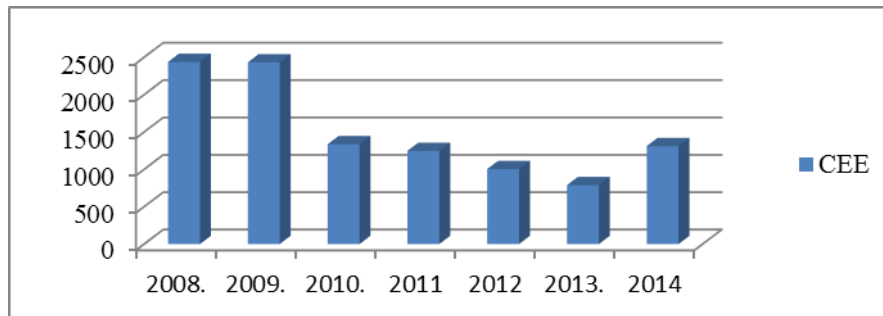


Chart 1: Total annual investment in CEE region 2008-2014 (in € million) (EVCA CEE statistics, 2015a, p. 11)

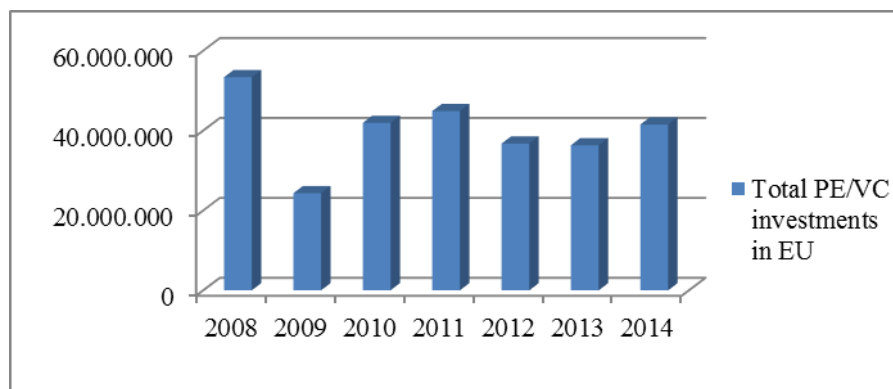


Chart 2: Total annual investment in Europe 2008-2014 (in € thousands) (EVCA CEE statistics, 2015a, p. 11)

The PE activity, i.e. the growth level of a country's market, on the national levels, is calculated as the ratio of PE investments to the gross domestic product (GDP) (Bernoth et al., 2010, p. 4, Soloma, 2013, p. 240). The peak of the CEE private equity investment as a percentage of the region's GDP was in 2009 (Chart 3) and amounted 0,209%. From 2009 to 2013 the ratio of PE investments to GDP was constantly decreasing, and has reached the lowest point in 2013, with the value of the ratio of 0,062%. In 2014 the ratio of PE investments to GDP (0,104%) shows a certain recovery according to 2013. Still, the ratio in 2014 compared to 2009 is smaller for 0,137 percentage points.

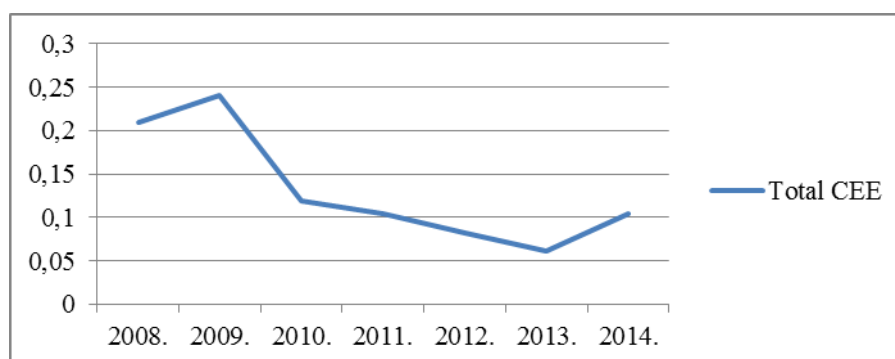


Chart 3: Ratio of PE investment value to GDP 2008-2014 (author's calculation based on Šimić, 2015, p. 279, EVCA CEE statistics, 2015a, p. 17)

## 5.2. Descriptive statistics for PE investments in Hungary, Poland and Czech Republic 2008-2014

By the size of PE/VC investments in the observed period three countries in CEE dominate: Hungary, Poland and Czech Republic (Chart 4). In 2009 their share in the total PE/VC investments in CEE was 76%, while in 2014 amounted 55%. Despite the reduction of 21 percentage points in 2014 compared to 2009, these three countries still dominate in the amount of PE/VC investments in CEE. On average, these three countries in the period 2008-2014 accounted for 69,43% of total PE investment value in CEE. This result shows how the importance of individual PE/VC markets remained unchanged.

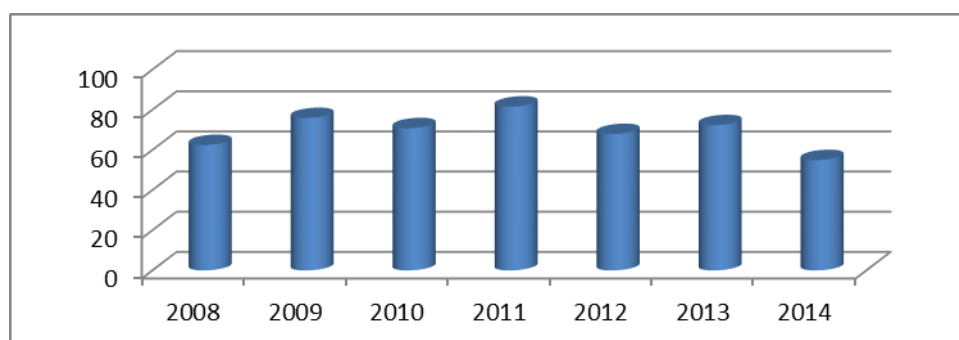


Chart 4: Private equity investment for Poland, Hungary and Czech Republic as a percentage of all PE investments in CEE from 2008 to 2014 (in %) – market statistics<sup>58</sup> (author's calculation based on EVCA Yearbook 2015)

The trend of PE investments in selected countries for the observed period is quite different. Hungary records investment decline from 2008 to 2013, except the 2011 and 2014 when a growth were recorded. Opposed to Hungary, Poland had a decline of investments in 2009, followed by a growth in 2010 and 2011, and again a decline from 2011 to 2014. Czech Republic is the only country which recorded extraordinary growth in 2009 as a result of a mega buyout transaction (Ptacek, 2014, p. 62). A sudden drop was recorded after 2009 and the bottom was achieved in 2012. The 2013-2014 data show certain progress. All above mentioned is shown in Chart 5. Level of total PE/VC investments in 2014 for Poland was 250 million €, for Hungary 170 million € and for Czech Republic 300 million €. These numbers are similar to those in 2009, except for Czech Republic for which the in 2009 was an exceptional year and therefore investments in the Czech Republic must be compared with 2008.

<sup>58</sup> „Are an aggregation of the figures according to the country in which the investee company is based, regardless of the location of the private equity fund“ (EVCA Yearbook 2015)

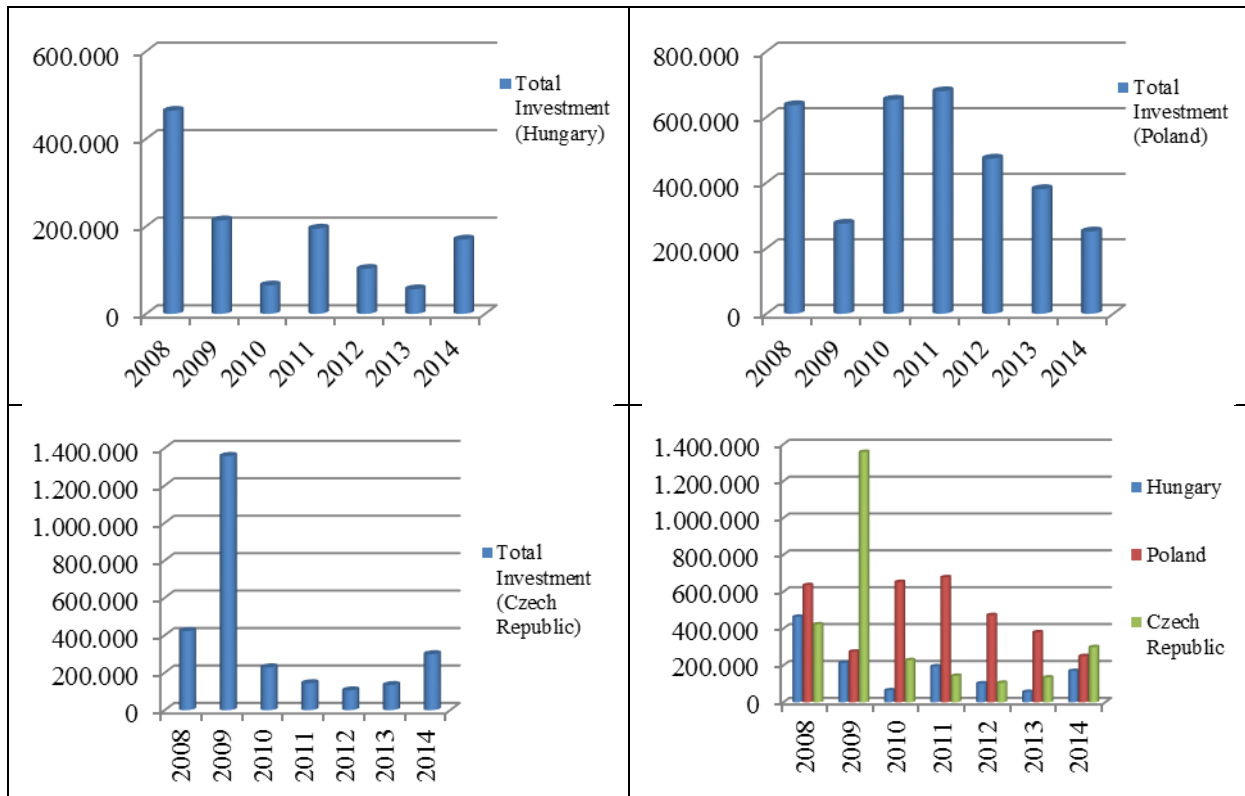


Chart 5: Total private equity investment in Hungary, Poland and Czech Republic 2008-2014 (in € 000) - market statistics (author's calculation based on EVCA Yearbook 2015)

## 6. CONCLUSION

The aim of this paper was to examine whether the PE and VC market in CEE has recovered after the recent financial crisis and whether the importance of individual PE/VC markets remained unchanged. During the last few years the focus of PE/VC investments has moved from traditional and mature PE/VC markets to emerging markets. Significant diversity exists in PE activity between countries in Europe, particularly between Western countries and countries in Central and Eastern Europe (CEE) as well as within CEE countries.

The European PE market in 2009 was seriously affected by the financial crisis, while the CEE region was affected a year later.

The total PE/VC investment in CEE for 2014 compared to the pre – crisis year is at level of 53,91% while for EU the ratio is at 77,78%. This result shows how the PE/VC investments in CEE compared to EU is recovering slowly and that the PE/VC market is still far from the level of investment in 2009. The ratio of PE investments to GDP from 2009 to 2013 was constantly decreasing and has reached the lowest point in 2013 with the ratio value of 0,062%. The ratio shows in 2014 a certain recovery (0,104%), but still the ratio in 2014 compared to 2009 is smaller for 0,137 percentage points.

Hungary, Poland and Czech Republic are three countries in CEE which dominate by the size of PE/VC investments in the observed period. On average, these three countries in the period 2008-2014 accounted for 69,43% of total PE investment value in CEE. This result shows how the importance of individual PE/VC markets remained unchanged. According to the total PE/VC data and the ratio of PE investments to the gross domestic product (GDP) the PE/VC markets in CEE are still recovering.

As future work I see research of individual stages of focus of PE investments, especially investments in the early stages, as well as the expansion of research on other CEE countries.

## LITERATURE

1. Allen, F, Carletti, E. (2009). *The Global Financial Crisis: Causes and Consequences*. Central Bank of Chile, Working papers, No 575.
2. Allen, W.A, Moessner, R. (2012). The international propagation of the financial crisis of 2008 and a comparison with 1931. *Financial History Review*, 123-147.
3. Bernoth, K, Colavecchio, R, Sass, M. (2010). *Drives of Private Equity Investment in CEE and Western European Countries*. Discussion paper. Berlin: German Institute for Economic Research.
4. Bethlen, M. (2012). *Venture Capital and Private Equity Industry Position Paper*. Hungary: Hungarian Venture Capital and Private Equity Association. Retrieved 25.08.2015 from [http://www.hvca.hu/wp-content/uploads/2012/05/HVCA-Position-Paper-ENG-Final\\_v3.pdf](http://www.hvca.hu/wp-content/uploads/2012/05/HVCA-Position-Paper-ENG-Final_v3.pdf)
5. Birdsall, N. (2012). *The Global Financial Crisis: The Beginning of the End of the "Development" Agenda?*. Washington DC: Center for Global Development.
6. Block, J, Sandner, Ph. (2009). What is the effect of the financial crisis on venture capital financing? Empirical evidence from US Internet start-ups. *Venture capital: An International Journal of Entrepreneurial Finance*, Vol. 11; No. 4, 295-309.
7. Block, J, Sandner, Ph, De Vries, G. (2010). *Venture capital and the financial crisis: an empirical study across industries and countries*. MPRA Paper No. 20287.
8. Czech Private Equity and Venture Capital Association (CVCA). (2015). Retrieved 28.09.2015. from <http://www.cvca.cz/en/>.
9. Cumming, D, Johan, S. (16.07.2012). Is Venture Capital in Crisis? The World Financial Review. Retrieved 01.10.2015 from <http://www.worldfinancialreview.com/?p=1563>
10. European Private Equity and Venture Capital Association (EVCA). (2015). *What is private equity*. Retrieved 02.02.2015 from <http://www.evca.eu/about-private-equity/private-equity-explained/>.
11. European Private Equity and Venture Capital Association (EVCA). (2015a). *Central and Eastern Europe Statistics 2014*. An EVCA special paper ed. by the EVCA Central and Eastern Europe Task Force.
12. EVCA Yearbook. (2015). *The EVCA Yearbook – 2014 European Private Equity Activity Data 2007 – 2014*. Retrieved 25.07.2015 from <http://www.investeurope.eu/research/activity-data/annual-activity-statistics/>.
13. Gibescu, O. (2010). *Households lending crisis for the most important countries of Central and Eastern Europe*. Bucharest: University of Financial Banking.
14. Groh, P. A, Liechtenstein, H, Lieser, K. (2008). *The Attractiveness of Central Eastern European Countries for Venture Capital and Private Equity Investors*, IESE Business School Working Paper No. D/677. EFA 2008: Athens Meetings Paper.
15. Hungarian Private Equity and Venture Capital Association (HVCA). (2015). *Private equity*. Retrieved 28.09.2015 from <http://www.hvca.hu/glossary/private-equity/>.
16. Hungarian Private Equity and Venture Capital Association (HVCA). (2015). *Venture Capital*. Retrieved 28.09.2015 from <http://www.hvca.hu/glossary/venture-capital/>
17. Karsai, J. (2011). *The 2011 results of the Private Equity and Venture Capital Industry*. Retrieved 25.08.2015 from <http://www.hvca.hu/wp-content/uploads/2011/12/THE-2011-RESULTS-OF-THE-PRIVATE-EQUITY-AND-VENTURE-CAPITAL-INDUSTRY.pdf>
18. KPMG. (2014). *Private Equity in Poland: Facts and Opinions*. Retrieved 16.06.2015 from

- <https://www.kpmg.com/PL/en/IssuesAndInsights/ArticlesPublications/Documents/2014/Private-Equity-Market-in-Poland-Facts-and-Opinions-2014.pdf>
19. Lazarevski, D, Mrsik, J, Smokvarski, E. (2012). *Evolution of the venture capital financing for growing small and medium enterprises in Central and Eastern Europe countries: the case of Macedonia*. MPRA Paper No. 41997.
  20. Lerner, J, Leamon, A, Hardyman, F. (2012). *Venture Capital, Private Equity, and the Financing of Entrepreneurship*, USA: John Wiley & Sons, Inc.
  21. Letica, B. (2010). *The First Global Financial Crisis in the 21<sup>st</sup> Century, Reasons and Consequences*. International Relations Quarterly. Vol. 1, No. 3.
  22. Polish Private Equity and Venture Capital Association (PSIK). (2015). *Private equity and Venture capital*. Retrieved 28.09.2015 from <http://www.psiik.org.pl/glossary.html>
  23. Ptacek, O. (2014). *Equity Gap on the Venture Capital Market in the Czech Republic*. International Journal of Business and Management Vol. II (1). 59 –75.
  24. Soloma, A. (2013). The Importance of the Depth of the Capital Market on International Venture Capital and Private Equity allocation decisions: The Case of Poland. *Economics and Management*: 2013.18
  25. Széles, Z, Széles, Z, Miszori, I. (2011). How does the Jeremie program affect Hungarian Venture Capital Market?. *International Journal of Economics and Finance Studies*, Vol 3, No 1, 273- 282.
  26. Šimić, M. (2015). Atraktivnost Hrvatske u privlačenju ulagača rizičnog kapitala. *Ekonomika misao i praksa*. Dubrovnik, god. XXIV., br. 1. 267-294.



## COMPARATIVE ANALYSIS OF SAFETY MANAGEMENT IN BUSINESS ORGANIZATIONS IN SERBIA AND CROATIA

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### ABSTRACT

*Management represents the process of changing the existing state in the society in accordance with the set goal or plan. Management as an organizational function is achieved by making management decisions and their implementation. Safety Management System is a permanent ongoing process of many structured and related activities in the area of safety that allows the normal flow of business processes and the functioning of the business system, thus achieving better economic results. Empirical research of the implementation of process management functions in safety management systems in Serbia and Croatia was conducted during the period from 2010 to 2014, in stages, for each process management function separately. The goal of this study was to determine the current knowledge and standpoints of implementing process management functions in safety management systems in Serbia and Croatia. The survey was conducted in accordance with established research problem, with achieved set tasks and confirmation of selected scientific research methods.*

**Keywords:** *Management, managing, process functions, safety*

### 1. INTRODUCTION

#### 1.1. Planning in safety management

If we are to apply the theory of management to safety management in business organizations, we can say that the basic process functions of safety management are planning, organizing, selection (human resource management), management and control. In this line of functions, the first is planning of safety. Planning is the first essential step in managing safety (Hunjak, Palačić, Petričević, 2010). Planning is the human activity that aims to control and predict our future as well as reduce the damages that may result from changes in market trends. Planning assumes three interrelated processes:

- Evaluation;
- Planning;
- Implementation (Baker, 1996).

The very preparation of planning includes collecting relevant information, development and documentation of the planning guidelines. Reliable sources of information may be of internal (statistics, financial statements, own researches, etc ...) and external nature (publications of state authorities and the cabinets, institutes, professional books, reports in newspapers and magazines, databases, publications of branch activities, etc ...).

Policy and safety strategy substantially affect the quality of the work program in organizations, and the result of their plan is to successfully achieve the objectives, savings and reallocation of financial funds and the transparency of operations in accordance with control of government organizations. A good strategic plan provides long term sustainability of integral safety management and business strategy of the organization, the performance effectiveness of managing business results, provides job satisfaction of employees, earnings, their vocational training as well as the satisfaction of their customers.

Organizational planning structure (function carriers, preparation and coordination of partial plans), direction, content and time frame planning, qualitative (decision tree, brainstorming...) and quantitative (mathematical optimization / benefit and values analysis...) planning techniques include development planning guidelines (Hunjak, Palačić, Petričević, 2010).

Bearing in mind the above guidelines, planning should include:

- Principles of planning, planning carriers and their functions;
- The content and scope of planning;
- Gantt chart;
- Planning methodology;
- Planned collection of information;
- Comparison of planned/accomplished;
- Facts and trends of development.

If the planning is not well prepared or executed, other processes management functions, and safety management, will be in question. Specifically, they will be in operation, but a problem can occur regarding their effectiveness and clarity.

## **1.2. Organizing safety management**

Organizing is one of the functions of safety management process. Organization means the activity (organizing) or a condition that has been achieved by organizing (order, arrangement, structure, system). Organization of work is harmonizing the operation of personal factors of the working process (workers) with the material (means of production), energy and information with the objective for the process to be completed with optimal results. Good organization is recognized by its good achieved effects (Palačić, 2011). The aim of safety management system includes the reduction of the risk level of main dangers and hazards that exist in business processes (risk of injury, fire, environmental pollution, technical accidents, criminal acts and natural disasters). Without a qualitative safety management system and organizational awareness regarding safety at work there is no safe working environment (Hunjak, Palačić, Petričević, 2010). Organizational behaviour aims to create certain knowledge by head of the organization as to why people in certain situations behave in a certain way and what needs to be done to change this behaviour and directed towards achieving the objectives of an organization (Todorović, Živković, Nikolić, Markić, 2012). Talking about the organization as a procedure, we refer to connecting parts to a new entity (e.g. the organizing safety services). If we talk about the organization as a result, then we think of unity, and the structure of the system that is often shown in organizational scheme (e.g., display of organizations safety scheme in the company). (Živković, Palačić, Anđelković, 2013). The task of managing organization is to provide solutions that will lead to an organized interface of all stakeholders and their interests, mutual alignment of these interests and organized implementation and control of the set goals (Buble, 2000).

Based on the previous considerations of organizing safety management system, we can conclude that awareness of the importance of safety confirms that organizing safety must be regarded as one of the basic elements of an effective safety management system. Due to mutual differences among business systems, organizing safety management is almost impossible to completely replicate into other business operating system. When organizing a safety management system, in order to better coordinate, it is necessary to take account of integrating all types of protection in a common organizational unit. Depending on the size of the business system, the dangers, the risks and the type of protection, certain aspects of organization are applied. Type of organizational structure, steps of organizing, the way of organizing safety management and type of organization in a greater or lesser extent affect the implementation of safety (Buble, 2000).

### **1.3. Human resource management in safety management**

People have a crucial role in the production process they introduce changes, add value, increase efficiency, and therefore are initiators of the future performances of the organization. The level of operating skills, working habits, creativity and motivation of employees, ultimately depends on the realization of objectives and mission of an organization (Micić, Arsić, 2010). Human resource management is the process of attracting, hiring, training, motivating, retention and rewarding employees, with the aim of creating a safe and equitable environment for employees on the one hand, and on the other hand achieving the strategic goals of the organization. (Boljanović Đorđević, Pavić, 2011). Through continuous improvement in safety management system optimal and positive processes in the business system are created in which all participating factors contribute. Implementing safety management systems eliminates hazards or reduces the risks of the main dangers of workplace, like injuries, fires, explosions, criminal acts, accidents, environmental pollution and natural disasters (Palačić, 2011).

Based on conducted research, Petersen presented a model for the study of safe behaviour and the construction of safe working environment for the overall management of human resources in the organization (Petersen, 2001). He concluded that there are three main subsystems to be pursued during the construction of an effective safety management system: physical system, management and behavioural system.

One of the most important researches is related to the research problems of an organization and work of safety at work services in business organizations in Croatia. The results showed a significant effect of safety at work services on the organization and management of human resources in companies, as well as the need for continuous improvement in occupational safety and knowledge and skills in management for all employees in the occupational safety service. Also, empirical research of work problematic of independent expert for safety at work in the medium-sized business organizations in Croatia and Serbia established the current knowledge related to their work. The study also confirms the significant impact of work organizing of experts for occupational health and safety as an aspect of human resource management in the field of occupational safety (Palačić, Živković, 2012).

The function of human resources management in organizations is an area where safety management and law converge. It is very important that human resource professionals are involved regarding employee safety and safety risks in development and implementation of risk management strategies and practices. Activities of human resource management sector of modern organizations must aim at continual strategic alignment. To achieve this, the function of human resource management must be directed towards its realization as a strategic partner of leadership of an organization, working to understand, and to facilitate consideration of the needs and goals of the initiative which would bring major changes, and to activities that would act as coach and facilitators in parent organizations.

### **1.4. Leadership in safety management**

Leadership is probably one of the most multileveled phenomena of social sciences (Stojanović Aleksić, Živković, 2012). Leadership manifests itself in many fields of human endeavour – it can speak about the political, social, religious, organizational, sport, economic, military leadership. Leadership is ability to influence, inspire and direct the individuals or groups to achieve the desired goals (Živković, Palačić, Stojković, 2013).

Leading people is the most complex function of safety management, and its purpose is to influence people so that they contribute more to the common goal. Speaking about leadership, we are really talking about the abilities and skills of manager to effectively and responsibly use the power, that manager has the ability to understand that people in different times and in different situations have different motives, has the ability to inspire subordinates and has the

ability to act in the way to develop a favourable climate for the promotion of motivation (Palačić, Petras, Živković, 2013).

Safety management system cannot be successful without leadership. Managers should have a positive impact on the safety management with a clear presentation and systematization of vision of safety, and at the same time motivate employees to its realization, acting as a behavioural role model and expressing concern for the welfare of workers, communicating and setting clear goals and standards of safety and observing and identifying positive behaviour in terms of safety. Effective leadership is characterized by leaders who focus on training and education, which provide support (Živković, Stojanović Aleksić, 2013) and provide necessary resource, encourage the greatest possible participation of workers in safety, generally speaking. Any group of people that has good results has a leader who is skilled in the art of leadership.

Leadership skills consist of four main components:

- The ability of successful and responsible use of power;
- The ability to understand that people in different times and in different situations have different motives;
- The ability to inspire;
- The ability to act in a way that will develop a favourable climate for promoting motivation (Borgudan, 2003).

For management to be successful, every manager must have skills that allow him to successfully perform its job. Basic skills are: technical skills, skills in dealing with people and conceptual skills. Technical skills include implementation of specific professional knowledge acquired through education and experience. Skills in dealing with people are related to the ability to work with people, understanding and motivating people, while conceptual skills are related to mental capacity analysis and diagnosis of complex situations so each manager could on time notice the problem, identify possible solutions, evaluate them and choose the best possible one to be in line with the objectives of the entire organization (Ilijaš-Juranić, Petar, Budimir Šoško, 2013). Leadership in safety management of modern organizations must follow and coordinate with the highest international safety standards as well as standards of operational management. The organization has to understand and to be responsible for the risk of their business and, more importantly, must understand the risks that present itself to people and the environment during the course of primarily, the process of operational activities, as well as other aspects of its activities. It is known that leadership is essential to creating a culture that supports and promotes strong health and safety performance of an organization. A manager or leader is vital in the effort to lift safety and productivity of employees to a higher level, which means that they must continually apply the attributes of good leadership. It is important that managers and leaders of teams are qualified for their key role of leaders of safety and that they are free to implement these skills at every level. Modern organizations imply the existence of a monitoring system of safety leadership skills.

### **1.5. Control in safety management**

Organizations are often subjected to audit and control, for example, finance, their impact on the environment or quality management. Control, as a business discipline, can be applied to health and safety management. Control in safety management is a structured process of collecting independent information on the efficiency, effectiveness and reliability of the overall safety management system and the development of plans for the implementation of corrective measures (Živković, Palačić, 2014).

Control of safety management supports monitoring by providing information to managers on how to and how effectively deploy and implement plans and components of safety management system. The control itself also needs to provide verification of the adequacy and effectiveness of safety management.

The adequacy of the safety management system is evaluated on the basis of a comparison between what has been established by collecting information in relation to the relevant "standard" or benchmark. If there are no clear standards, process control will be unreliable.

Control should recognize the positive achievements, as well as to identify areas that need improvement. Some controls use grade systems (*scoring systems*) in order to supplement the decisions and recommendations. This can be helpful when comparing the results of control over a certain period of time or between locations, but there is no evidence that the quantification of the results gives a better reaction (response) of approaches that provide only qualitative evidence.

In order to maximize benefits, process control should be conducted by competent persons, regardless of the area or activity to be controlled.

## **2. RESEARCH METHODOLOGY**

### **2.1. The research problem**

The problem of this research is the lack of current knowledge about the problem of the use of process management functions in safety management system, as well as the lack of a comparison of the research results in Serbia and Croatia.

### **2.2. The research objective**

The research objective is to determine the current knowledge and views or standpoints about the implementation of process management functions in safety management system in Serbia and Croatia. Based on analyzed standpoints, results will be determined and compared.

### **2.3. Research tasks**

In accordance with the set objectives of the research, research tasks are to determine and compare:

- Assessments and opinions on implementation of planning in the safety management system in Serbia and Croatia;
- Assessments and opinions on implementation of the organization of safety management system in Serbia and Croatia;
- Assessments and opinions on implementation of human resource management in safety management systems in Serbia and Croatia;
- Assessments and opinions on implementation of management in safety management systems in Serbia and Croatia;
- Assessments and opinions on implementation of control in safety management system in Serbia and Croatia.

### **2.4. Research method**

In this research it is used a survey method of written questionnaires. The research was a descriptive-analytic and questionnaire contains two main groups of questions: questions that include general information about the respondent and the company, the views of respondents on the implementation of specific process management functions in safety management system in the company where they work. Depending on the complexity of the individual process functions, questionnaires have more or less questions that contain sub issues. Questions are in intensity of Likert type with five possible answers distributed from unsatisfactory (1), satisfactory (2), good (3), very good (4) to excellent (5). The same are also the numerical score of certain indicators that are being investigated by the survey.

Research sample of implementing each process management function to be applied in safety management system and comparative analysis, is presented at the beginning of the display of each individual research and comparative analysis.

The survey was conducted in stages for each management process function individually, in the period from 2010 to 2014.

## **2.5. Statistical methods**

For data analysis collected by the research, methods of descriptive and inferential statistics are used. These methods allow to describe the phenomenon as well as draw conclusion on the characteristics of the population based on the data. In the processing and presentation of research results are used frequency (f), percentage (%), the sum ( $\Sigma$ ), arithmetic mean (M), standard deviation of the population (s), coefficient of variation of the population (H) expressed as a percentage (%). Statistically significant differences between the results of the evaluation of the implementation of planning type and evaluation of the individual planning areas of safety are tested by chi-square test ( $\chi^2$ ). In order to determine whether there are statistically significant differences in result, it is set so called "null hypothesis"  $H_0$  assuming that "there is no statistically significant differences among the samples."

## **2.6. Hypotheses**

Hypotheses are set for each process management function to be applied in safety management system. Acceptance or rejection of the hypothesis is presented in the results and discussion of research.

# **3. RESEARCH RESULTS AND DISCUSSION**

## **3.1. Planning in safety management system**

If we are to apply management theory to the safety management we can say that their core process functions are: planning, organizing, human resource management, leadership and control. In this series, the first function is safety planning. Everything starts from planning and the only correct approach to safety management is through planning. Planning is a systematic way of making basic decisions, shaping tactics and role of the activities that need to be adapt and lead the organization into the future, following its vision of defining the objectives, times and modes of action. The very preparation of planning includes collecting relevant information, development and documentation of the planning guidelines.

Results of the research show that in the safety management system in Serbia (56.40 %) and Croatia (66.99 %) are applied a one-time, permanent and contingency plans. Set hypothesis in Serbia is partially accepted, and in Croatia it is accepted.

In the safety management systems are applied short, medium and long term planning period. In Serbia, in the average of 47.48 % of cases, and in Croatia in 54.17 % of cases apply mentioned planning period. Therefore the hypothesis is rejected in Serbia and in Croatia it is accepted.

According to research results in Serbia in average of 71.51 % of cases, while in Croatia the average in 70.91 % apply types of safety management planning. Therefore, the set of hypotheses in Serbia and Croatia are accepted.

The average score of implementing certain types of planning in the safety management system in Serbia is 3.86, and in Croatia 3.22. Based on these results, the hypothesis on the implementation of certain types of planning in Serbia is accepted, and in Croatia it is rejected. Among all other questions, respondents were asked about satisfaction by implementation of individual planning areas. In Serbia, the overall average rating of implementing individual planning areas was 3.88, and in Croatia 3.09. Therefore, the hypothesis is accepted in Serbia and rejected in Croatia.

According to the research, a total of 87.21 % of the respondents from Serbia considered that planning has a significant and extremely significant impact on the implementation of safety, while in Croatia only a total of 57.69 % of the respondents considers the same way.

In Serbia, the employer was responsible for the planning of safety management in the company in 25.58 % of cases, while in Croatia in 43.27% of cases. Based on the above research results, the hypothesis that the employer in most cases (over 50 %) in safety management system is responsible for planning, is rejected.

A comparative analysis of the planning systems of safety management in Serbia and Croatia was conducted and it showed certain similarities but also differences. In the area of safety where implementation procedures and measures have a direct impact on reducing the probability of adverse events, planning is of special importance. Achieving goals is impossible without planning. Effective planning increases the effectiveness of safety management systems. Other conducted research deal not only with planning, but also with management in general and leadership. The results of these research can not be compared with the results and conclusions of this comparative analysis. The comparative analysis in the field of planning in the safety management system were not found.

### **3.2. The organizing of the safety management system**

Organizing is one of the process functions of safety management. According to the empirical comprehension, the concept of the organization can be defined as the differentiation and coordination of tasks to achieve the objectives which depends on the situation and influences the behaviour of members.

Although each separate area of protection on the basis of regulations has defined the minimum criteria for the organization of safety, overall safety management goes beyond this framework. The task of the organization is to provide safety management solutions that will lead to organized interfacing of all participants and their interests, mutual alignment of those interests, as well as organized implementation and control of the set goals.

Results of the research show that in Serbia 42.05 % of the respondents in safety management system apply the managerial aspect of the organization; while in Croatia 53.39 % of respondents apply proprietary and managerial aspects of the organizing safety management system.

The safety management system in Serbia has up to 87.69 % implemented functional organizational structure, while in Croatia, that is the case in 55.08 % of the respondents. Therefore, the hypothesis on implementation of functional organizational structures is accepted in both countries.

In Serbia, division based on the field of protection applies in 31.28 % of cases, while in Croatia it applies in 40.68 % of cases. Based on these results, the hypothesis is in Serbia and Croatia is rejected.

According to the results of the research, average rating of implementing steps in organizing process of safety management system in Serbia is 4.02, and in Croatia 3.09. In Serbia, all areas of the organization are estimated in average grade greater than 3.5 and in Croatia in an average score less than 3.5. Based on these results, the hypothesis on the implementation of certain types of planning in Serbia is accepted, and in Croatia it is rejected.

Average level of satisfaction by organizing individual areas of safety management systems in Serbia is 3.95 and 3.19 in Croatia, while in Serbia all evaluated areas of planning are in average score of more than 3.5 and in Croatia in average score less than 3.5. Therefore, the hypothesis is accepted in Serbia, and in Croatia it is rejected.

According to conducted research, a total of 88.20 % of the respondents in Serbia consider that the impact of organizing safety management system on implementing safety is significant or extremely significant, while in Croatia, a total of only 50 % of respondents considers the same way.

In Serbia, in 25.13 % of cases the employer is responsible for organizing safety management in the company, while in Croatia the employer is responsible in 37.29 % of cases. Based on the above research results, the hypothesis that the employer in most cases (over 50 %) in the safety management system is responsible for organizing is rejected.

Conducted comparative analysis of organizing safety management systems in Serbia and Croatia showed certain similarities but also differences. Functional organizational structure is prevalent in the organizing system of safety management in both countries. In other areas of organizing that are covered in this research presented are differences and deviations from hypotheses. The obtained results show the practical side of implementing theory of organization in the organizing safety management system. Also, the results presented in research comparative analysis point to the need for safety education of safety representative on organizing safety management. Other researches that have been conducted do not deal exclusively with organizing, but deal with general leadership and management. Results of these studies cannot be compared with the results and conclusions of this comparative analysis. The comparative analyses in the field of organizing safety management system were not found.

### **3.3. Human resource management in the safety management system**

Human resources are comprised by human capital, i.e., employees whose skills, knowledge, motivation, skills, experience, creativity, loyalty, contribute to the successful achievement of the objectives and business development of an organization. Human resource management is a complex process that makes a series of interconnected activities, tasks and activities of the organization's management.

Results of the research show that the safety management system in Serbia with 82.93 % of the human resources management in the safety management system, is influenced by changes in the internal environment, while in 46.34 % changes in the business environment, and in 43.90 % of cases are affected by changes in general, and social environment. In Croatia, in more than 68 % of cases, each of the areas is affected by the human resource management in the safety management system. In average of 76.87 % in mentioned areas affect on human resources management in safety management system. Therefore, the hypothesis in Serbia is rejected, and in Croatia it is accepted.

In Serbia, most respondents (90.24 %) in the safety management system apply motivation and rewarding, while the 85.37 % apply education and development. Recruitment and selection is applied in 45.53 % of cases, and 41.46 % of cases apply anticipation of needs. In average of 65.65 % of cases the safety management system applies areas of human resource management. In Croatia, each of the main areas of human resource management applies in more than 63 % of cases. In average of 72.39 % of cases the safety management system applies these areas of human resource management.

According to the results of research, in Serbia all operations of human resources management are implemented in more than 65.85 % of the cases, with exception of compensation implemented in only 31.71 %. In average of 70.33 % of cases tasks of human resources management are conducted in the safety management system. In Croatia, all the tasks of human resource management are conducted in more than 53 %. In average of 73.60 % of cases, tasks of human resource management are done in safety management system.

According to the survey, average rating of implementing basic activities of human resource management in the safety management system in Serbia is 3.01, and in Croatia 3.11. Therefore, the hypothesis in Serbia and Croatia is rejected.

In Serbia, in all areas of safety management system implementation of human resources management is evaluated with less than 3.5. The average satisfaction grade of implementing human resources management in a single field of safety management systems is 2.95. In Croatia, out of 9 areas, in 5 areas the satisfaction was evaluated higher than 3.5. The average



satisfaction grade of implementing human resources management in a single area of safety management is 3.51. Based on the above data, the hypothesis is rejected in Serbia and in Croatia it is partly accepted.

According to the research conducted in Serbia in total 50.40 % of respondents believe that managing human resources is extremely important and it has significant impact on the implementation of safety, and in Croatia total of 62.69 % of respondents consider the same way. In Serbia, in 23.58 % of cases the employer is responsible for human resources management in safety management, while in Croatia even in 48.51 % of cases. Based on the above research results, the hypothesis that the employer in most cases (over 50 %) in the safety management system is responsible for organizing is rejected.

### **3.4. Leading in the safety management system**

Under the leadership we mean the ability and skills of managers to efficiently and responsibly use the power, that manager has the ability to understand that people in different times and in different situations have different motives, that manager has the ability to inspire subordinates and has the ability to act in a way that will develop a favourable climate for encouraging motivation. Results of the research show that the safety management systems in Serbia (68.13 %) and Croatia (63.77 %) apply most democratic leadership style, thus confirming the set hypothesis.

In leading, four basic models and approaches to leadership are applied, and research is in line with the set hypothesis, which confirmed that in Serbia 80.63 % of cases apply modern approaches to leadership, and the model of personal characteristics applies only 24.38 % of the cases. In Croatia, the safety management system most frequently uses model of personal characteristics (67.39 %), so the hypothesis is rejected.

According to research conducted in Serbia 84.38 % of cases apply expert power, followed by the 43.75 % that apply legitimate power. In Croatia, in leading in safety management system commonly uses legitimate power (70.29 %), while the expert power is only in third place, used in 62.32 % of cases. Accordingly, the hypothesis that in most cases (over 50 %) in leading in safety management system legitimate and expert power is applied partly is accepted.

In safety management system in Serbia, the most prominent characteristic of leaders is knowledge of work (83.75 %), and leaders in average of 68.02 % of the cases have the necessary basic characteristics. In Croatia, in safety management system the most prominent leader characteristic is self-confidence (86.96 %), and leaders in average of 73.31 % of the cases have the necessary basic characteristics.

The average score of implementing basic characteristics of leadership in the safety management system in Serbia is 3.81, and in Croatia 3.62. Based on these results, the set hypothesis on the evaluation of implementing certain basic characteristics of leadership in the safety management system (motivation, communication, guidance, decision-making, interaction, influence, establishing goals, control) is accepted. All the characteristics of leadership in Croatia are not evaluated greater than 3.5, while in Serbia they are.

Respondents in Serbia have every single area of safety management systems evaluated higher than 3.5, and the average satisfaction grade in the individual leadership in the field of safety management system is 3.82. While respondents from Croatia have not all individual areas of safety management system evaluated higher than the 3.5, average satisfaction grade of the individual leadership in the field of safety management system is 3.54.

According to the conducted research, a total of 91.25 % of the respondents from Serbia considers that leadership has a significant and extremely significant impact on the implementation of the safety, and in Croatia a total of 56.52 % of the respondents considers the same way.

Results of research in Serbia show that in 36.25 % of cases for leadership in safety management

in the company, responsible is the employer himself, and in Croatia that is so in 39.86 % of cases. Based on the above research results the hypothesis that the employer is responsible for managing in these systems in most cases (over 50 %) is rejected.

Conducted comparative analysis of leadership in the safety management in Serbia and Croatia showed certain similarities but also differences. The most significant difference shows that leadership in safety management system in Serbia applies mostly expert power, and legitimate power in Croatia. Since it was noted that the function of leadership is of great importance for the efficiency of the safety management system, business organizations should consider the need for additional education of safety leaders and managers in the field of leadership. With leadership function, safety managers help people see that they can meet their own needs and use their potential for immediate contribution to the safety system goals. Efficient management increases efficiency of safety management system. Other researches that were conducted do not deal exclusively with leadership, but also deal with general leadership and management. The results of these researches cannot be compared with the results and the conclusions of this comparative analysis. Comparative analyses from field of leadership in the safety management system were not found.

### **3.5. Control in safety management system**

Control, represents measuring and correcting parts of the process in order to ensure fulfilment of business objectives, among which are also the objectives of safety management. The first step of control is to define plans. On the basis of plans, control is being implemented in safety management system.

Results of the conducted research show that the safety management systems in Serbia (71.57 %) and Croatia (68 %) in more than 50 %, apply all control phases, thus confirming the hypothesis.

In practice, the control is implemented on four main levels, and research is in line with the set hypothesis which confirms that in Serbia (70.86 %) and Croatia (66.43 %) in the safety management systems all levels of control are implemented.

According to research in Serbia (85.28 %) and Croatia (81.14 %) by control in the safety management system from techniques commonly used is personal observation. The research results show that all four control techniques are used in more than 50 % of cases. Given that in most cases (over 50 %) in the control of the safety management systems all techniques of control are applied, the hypothesis is accepted.

Average grade of implemented conditions of control efficiency in the safety management system in Serbia is 3.38, and in Croatia 3.25. It is necessary to emphasize that the implementation of all requirements of efficiency control in both countries are evaluated with grades less than 3.5. Based on those results the hypothesis that the respondents have evaluated implementation of the conditions of efficiency control in the safety management system with an average grade of 3.5 is rejected.

In Serbia, the average satisfaction grade in the control of the individual area of safety management system is 3.56. Respondents from the Croatia, satisfaction in control of the individual areas of safety management systems rated in average grade 3.44. Therefore, the hypothesis in Serbia is accepted, and in Croatia it is rejected.

According to the research a total of 73.62 % of the respondents from Serbia considers that the control has a significant and extremely significant impact on the implementation of safety and in Croatia a total of 65.72 % of the respondents considers the same way.

In Serbia, the employer is responsible for controlling the management of safety in the company in 28.83 % of cases, while in Croatia the employer is responsible for the control in 49.71 % of the cases. Based on the results of conducted research the set hypothesis that in over 50 % of cases the person responsible for controlling the safety management of the company is the

employer himself, is rejected.

Conducted comparative analysis of control in safety management systems in Serbia and Croatia showed certain similarities but also differences. Control is a function of each manager, or the person who manages other people. The main control system includes setting parameters (performances), measuring the efficiency indicators (performances), correction of deviations from indicators (performances) and plans, which is in the area of safety of particular importance for achieving the objectives of the system. Effective control increases the efficiency of safety management systems. Other conducted researchers deal not only with control, but also with general leadership and management. The results of these researches cannot be compared with the results and conclusions of this comparative analysis. Comparative analyses of areas of control in safety management system were found.

#### 4. CONSLUSION

Empirical research was carried out in stages for each process management function separately, in the period from 2010 to 2014. Conducted empirical research of implementation process in management functions in safety management systems in Serbia and Croatia, has reached the set objective of research. The research was conducted in accordance with established problem with the accomplishment of set tasks and confirmation of selected scientific research methods. Due to the particular problem, the aim of the research was to determine current knowledge and views on the implementation of process management functions in safety management systems in Serbia and Croatia. Based on this analysed standpoints and views, results were determined and compared.

The tasks of the research were to identify and compare:

- Assessments and opinions on implementation of planning in the safety management system in Serbia and Croatia;
- Assessments and opinions on implementation of the organization of the safety management system in Serbia and Croatia;
- Assessments and opinions on the implementation of human resource management in safety management systems in Serbia and Croatia;
- Assessments and opinions on implementation of management in safety management systems in Serbia and Croatia;
- Assessments and opinions on implementation of control in the safety management system in Serbia and Croatia.

Hypotheses are set for each process management function to be applied in safety management system. Acceptance or rejection of the hypothesis is presented in the results and discussion of research. Current knowledge about the implementation process functions management in safety management systems in Serbia and Croatia is established, which is on the basis of analysis of the results of the research, reflected in the acceptance or rejection of the research hypotheses. Presentation of acceptance or rejection of set hypotheses is shown in the conclusions on each individual research of implemented process management functions in safety management systems in Serbia and Croatia. In the discussion of the research results further is indicated on the distinctions and conclusions regarding the individual set hypotheses.

To continue research, suggested is possibility of detailed and specific analysis of the data collected in this research, such as grouping the sample by industry or size of the organization, after which is possible to carry out a comparison of the results with the results of this research. The possibility to continue research exists also in determining the connection of some of the results obtained by using correlation and regression analysis. In order to determine the possible improvement of implementation process management function in the safety management system, it is proposed to repeat the same research after at least five years. This would enable comparison of the results and determination of positive developments in the promotion of the

implementation process of management functions in safety management systems in Serbia and Croatia. In function of setting goals and hypothesis of the new research this research can be used.

Established methodology proved to be adequate for the empirical research of implementing process management functions in safety management systems in Serbia and Croatia and their comparative analysis. The same methodology can be applied to similar research on the implementation of process management functions in the safety management system in other countries or in other similar researches in areas of safety management.

## LITERATURE

1. Armstrong, M. (2006). *A Handbook of Human Resource Management Practice*. 10<sup>th</sup> edition, London: Kogan Page.
2. Baker, J.M. (1996). *Marketing: An Introductory Text*, London: MacMillan Press LTD.
3. Boljanović Đorđević, J., Pavić, Ž. (2011). *Osnove menadžmenta ljudskih resursa*. Beograd: Univerzitet Singidunum.
4. Borgudan, G. (2003). 10 zapovijedi uspjehnog vođe, *Poslovni magazin*. I, 12, 24-25.
5. Buble, M. (2000). *Management*, Split: Ekonomski fakultet.
6. Hunjak, D., Palačić, D., Petričević, N. (2010). Istraživanje stajališta o planiranju upravljanja sigurnošću. *Zbornik radova V. Znanstveno-stručne konferencije s međunarodnim sudjelovanjem "Menadžment i sigurnost 2010"*, HDIS, Čakovec, pp. 21-35.
7. Ilijaš-Juranić, B., Petar, S., Budimir Šoško, G. (2013). Utjecaj stilova vođenja na motivaciju sudjelovanja članova organizacije u provođenju sigurnosnih procedura. *VIII. Međunarodna znanstvena i stručna konferencija "Menadžment i sigurnost M&S 2013"*, HDIS, pp. 217-226.
8. Ivanova, T., Živković, S., Ivanov, A. (2011). Leadership potential as a key factor in the success of managers in companies of Ulyanovsk Region. *African Journal of Business Management*, 5, 33, pp. 12754-12761.
9. Micić, R., Arsić, Lj. (2010). Upravljanje ljudskim resursima u organizacijama. *Ekonomski pogledi*, 2, pp. 27-40.
10. Palačić, D., Petras, M., Živković, S. (2013). Istraživanje stajališta o vođenju u sustavu upravljanja sigurnošću. *VIII. Međunarodna znanstvena i stručna konferencija "Menadžment i sigurnost M&S 2013"*, 8, pp. 81-93.
11. Palačić, D., Živković, S. (2012). Usporedna analiza organiziranja sustava sigurnosti kao aspekta upravljanja ljudskim resursima u Hrvatskoj i Srbiji. *VII. Znanstveno-stručna konferencija s međunarodnim sudjelovanjem "Menadžment i sigurnost M&S 2012"*, HDIS, pp. 173-184.
12. Palačić, D. (2011): Istraživanje stajališta o organiziranju sustava upravljanja sigurnošću. *Zbornik radova VI. Znanstveno-stručne konferencije s međunarodnim sudjelovanjem "Menadžment i sigurnost 2011"*, HDIS, Čakovec, pp. 33-47.
13. Palačić, D. (2011). *Sustavi upravljanja sigurnošću*, Zagreb: IPROZ.
14. Palačić, D. (2008a). Elementi učinkovitog sustava upravljanja zdravljem i sigurnošću na radu. *2. međunarodni stnično-znanstveni skup Zaštita na radu i zaštita zdravlja*, Veleučilište u Karlovcu, Hrvatsko ergonomijsko društvo, Hrvatski zavod za medicinu rada, Boise State Univerzity, HOC Bjelolasica, pp. 351-356.
15. Palačić, D. (2008b). Preliminarno istraživanje kulture sigurnosti kao elementa sustava upravljanja sigurnošću. *Zbornik radova III. Znanstveno-stnične konferencije s međunarodnim sudjelovanjem "Menadžment i sigurnost 2008"*, HDIS, Čakovec, pp. 90-105.

16. Petersen, D. (2001). *Safety management: A human approach*. Des Plaines: American Society of Safety Engineers.
17. Stojanović Aleksić, V., Živković, S. (2012). The role of a leader in increasing the organisational capacity for change, Current problems of competitiveness improvement in national economies and enterprises. *Thematic collection of papers of international significance*, University of Niš, Faculty of Economics in Niš, pp. 297-314.
18. Todorović, M., Živković, S., Nikolić, V., Markić, M. (2012). The influence of organizational culture of management on occupational safety. *Technics Technologies Education Management*, 7, 4, pp. 1760-1767.
19. Živković, S., Palačić, D., Anđelković, B. (2013). Usporedna analiza stajališta o organiziranju sustav upravljanja sigurnošću u Hrvatskoj i Srbiji. *Sigurnost*, 55, 4, pp. 303-318.
20. Živković, S., Palačić, D., Stojković, A. (2013). Usporedna analiza vođenja u sustavu upravljanja sigurnošću u Hrvatskoj i Srbiji. *VIII. Međunarodna znanstvena i stručna konferencija "Menadžment i bezbednost M&S 2013"*, 8, pp. 139-151.
21. Živković, S., Palačić, D. (2014). Research of controlling in the safety management system. *Safety Engineering*, University of Niš, Faculty of Occupational Safety, Niš, 4, 1, pp. 9-16.
22. Živković, S., Stojanović Aleksić, V. (2013).: The role of psychological factors in increasing organizations' competitiveness, Improving the competitiveness of enterprises and national economies - factors and strategies. *Thematic collection of papers of international significance*, University of Niš, Faculty of Economics in Niš, pp. 187-205.

## A NEW APPROACH TO HAPPINESS FUNCTION FORMALIZATION: THE ROLE OF SOCIAL ENVIRONMENT

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### ABSTRACT

*Once upon a time the great player Nature made the prime move and directed human's steps towards search of happiness. Many philosophers, psychologists, sociologists, economists tried to give their own answers of what happiness is, how is it gained and how it can be measured, whether money makes us happier, etc. There are numerous examples of theoretical and empirical studies in modern economics of happiness. Interpreting this socio-economic concept in a broader sense as positive emotions and feelings associated with particular events and changes in life course, we attempt to construct a dynamic model of individual's choice in pursuing his/her portion of happiness. In each period of their lives economic agents can choose some actions from their personal feasible set. Each action is represented by a numerical vector which we interpret as a simultaneous contribution of different aspects associated with action to individual's perception of happiness. This vector is mapped to a certain level of happiness via specific happiness function in accordance with personal attitude towards life. Some stylized facts documented by social scientists allow us to presume that individual's philosophy of life is imperturbable in some aspects while it is rather flexible in others. The latter part relates to transformations of mental attitude to life caused by influence of peers and social environment in a broad sense. Recursive instances of emerging social ties unambiguously contribute to people's perception of good and bad, life satisfaction and happiness. What we explicitly assume in our model is that new acquaintances among people might result in an exchange of admissible actions and have long-term consequences on individuals' level of happiness.*

**Keywords:** *Attitude to life, Happiness function, Social network*

### 1. INTRODUCTION

About forty years ago, interest in analysis of people's happiness has been revived in economic literature. This strand of research has produced a plenty of interesting and something intriguing findings since that time. Indeed, it becomes evident why economics was once called a 'dismal science' (Carlyle, 1850), when we look at pioneering studies in this field by Richard Easterlin (1974) and Tibor Scitovsky (1976). They showed first that there was virtually no aggregate change in a level of people's happiness since 1946 till 1970, even though the world economy was steadily growing during that time and second that 'more is not necessarily better'. The implied 'paradox of happiness' has questioned the mainstream thought in economics of that time which relied on assumptions of individual's rationality and limitless needs.

Many years before the first empirical studies had been done, American psychologist and philosopher William James mentioned: "How to gain, how to keep, how to recover happiness is in fact for most men at all times the secret motive for all they do" (James 1902, p. 76). Later, a newly developed field of happiness economics has raised again one the most important questions in a history of mankind – Where does a continuous pursuit of happiness lead us? This question, however, might be too broad and vague for a single research. Thus, in our paper we

narrow it by constructing a theoretical model of individual's pursuit of happiness built on a set of stylized facts from cross-disciplinary studies on happiness.

Even though the number of studies related to this topic is growing rapidly year after year, the nature of happiness still remains unclear and uneven for researchers. "Happiness can mean pleasure, life satisfaction, positive emotions, a meaningful life, or a feeling of contentment, among other concepts" (Diener, Scollon, & Lucas, 2009, p. 68). In his studies, Richard Easterlin uses "terms happiness, subjective well-being, satisfaction, utility, well-being, and welfare interchangeably" (Easterlin, 2001, p. 465). Other economists (Frank, 2005; Layard, 2005) use the category of subjective well-being as a synonym of happiness, referring to the psychological aspects of the latter. Finally, a British philosopher Jeremy Bentham classified 'happiness', 'pleasure' and 'utility' as closely related concepts and defined utility as a specific property of things to bring benefits and happiness to those who utilize them (Bentham, 1789).

In classical utility theory, however, the terms 'utility' and 'happiness' cannot be equated. The former is supposed to be inferable from observed choices of people based on tangible characteristics of goods and services, whereas the latter is considered by utilitarians to be 'unscientific' since it relies on subjective experience and cannot be objectively observed (Frey & Stutzer, 1999). Therefore, one might also argue that studying individual happiness means to challenge the standard utility theory.

In our research we step back from a conventional concept of 'decision utility' and focus on subjectiveness of happiness. We refer to a broader concept of 'subjective well-being' which, according to Powdthavee (2007) includes two components: "'experienced' utility, which is based on an individual's experiences of consumption or life events in the past, as well as 'procedural' utility or the utility derived from the mere act of engaging in an activity preferred by the individual" (Powdthavee, 2007, p. 54).

The question of what actually makes people happier has been bothering philosophers, psychologists, economists and probably every single person since the ancient times. For a Greek philosopher Aristotle, for example, happiness was seen as an indirect byproduct of virtuous actions. Often many things do not make us happier only because of simple consumption, but rather the actions which we are involved in to obtain those things or the actions which become directly or indirectly enabled with those things make us feel happiness and life satisfaction. The notion of 'procedural' utility fits, to our point of view, the above mentioned fact.

We claim by our model that one should think about the choice of actions rather than goods when measuring changes in relative well-being. The latter can be presumably derived from individual's actions accompanying a lifelong pursuit of happiness. Thus, we attempt to model this process explicitly and discuss the role played by choice of actions in human's life.

It is reasonable to assume that one would derive happiness only from upright and virtuous actions. This criterion, however, is highly subjective and it strongly depends on person's ability to correctly judge what is good in his/her life (Vivenza, 2007). This ability shapes, to our mind, personal preferences over a set of feasible actions. We elaborate more on how these preferences enter individual's maximization problem and what is meant by feasible set in the following section. At this point, it is important to stress that in our model tastes are not prescribed as it was assumed in economic theory for a long time. A significant body of the literature now shows that our tastes are not stable, they are continuously influenced by our personal traits, past histories and social environment (Becker, 1996; Brock & Durlauf, 2001).

Personality and temperament, as well as personal values and goals seem to play an important role in determining the level of subjective well-being or happiness of individuals (Bruni & Porta, 2008). We refer later on in our model to such personal characteristics jointly as an 'attitude to life'. Particularly, it might be reasonable to assume that each characteristic would express a individual perception of a specific necessity of life that might be relevant for happiness attainment. Some of these characteristics might be innate to a person and stay

unchanged through the whole life. In fact, psychologists found that about half of our personality traits are inherited (Weimann, Knabe, & Schöb, 2015).

At the same time, individual's perception of what is good might undergo constant changes throughout the lifetime. This is not the moral rectitude, of course, which might be firmly integrated to one's personality and would never be neglected in his/her life. Instead, there always exist some flexible opinions and ideas which can be challenged and adjusted under the social pressure (Asch, 1955). Impact of social environment on individual's attitude to life, his/her attainment of happiness definitely cannot be ignored. Interactions in a social environment are usually associated with either reciprocal or unilateral messages which carry some information to their recipients. It was found in a seminal paper by Granovetter (1973) and confirmed by many subsequent studies that the lower is a frequency of such social interactions, the higher is a value of transmitted information meaning that incident acquaintances provide radically new findings to people more frequently than tight connections do.

Finally, subjective perception of happiness might be influenced by previous experiences in the past which fits the definition of 'experienced' utility mentioned earlier in this section. In behavioral economics it is usually referred to as 'internal reference point' – own past or expected future income to which the current level is compared (Clark, Frijters, & Shields 2008). Indeed, people tend to think about their life satisfaction in terms of relative achievements and memories about the earlier times.

To summarize, here we highlight the stylized facts, which can be implied from what has been said so far about individual's pursuit of happiness:

1. Happiness is derived from activities leading or following the consumption of goods or services, rather than from a mere act of consumption.
2. People prefer to act virtuously in pursuit of happiness.
3. Individual's preferences over feasible activities are shaped by his/her personal traits, past histories and social environment.
4. About half of our personality characteristics composing our comprehensive attitude to life are inherited, others are subject to change caused by external factors.
5. Social environment has an impact on individual's attitude to life, perception of good and attainment of happiness.
6. Subjective perception of happiness might be influenced by previous experiences in the past ('internal reference point').

In the remainder of this paper we first develop a formal model incorporating the aforementioned stylized facts characterizing individual's path to happiness and life satisfaction, then we describe the simulation process which is run to show dynamics of the model and finally we conclude.

## **2. THE MODEL**

In this section we attempt to construct a dynamic model of individual's choice in pursuit of happiness, in order to get a better understanding of human behavior. Based on some plausible reasoning this model gives us a verisimilar story of how things might work. However, at this stage of our study we leave open the question of how the model can be tested and calibrated to get a better fit with reality.

### **2.1. Setup of the Model**

Our main assumptions cover both some general aspects of human behavior and certain stylized facts highlighted in introduction.

In our model the society is composed of heterogeneous agents with different 'philosophy of life' that results in different attitude of individuals to identical events occurring in their lives. These events cover various aspects of one's private life, lives of nearest relatives, colleagues and other peers, as well as different sides of social and political life. Public events can be



considered as positive or negative externalities depending on social, psycho-emotional status and moral principles of a person. The number  $L$  of agents in the economy is assumed to be fixed over the whole time period under consideration.

Suppose that we have an opportunity to conduct a survey and reveal every possible source of human satisfaction (the necessities of life that in some sense can contribute to happiness) existing in a society: to be healthy, to have a partner, to take a rest, to feel protected, to meet with family approval, to feel self-esteem, etc., that is all feelings and states considered to be favorable at least for one person. As the result of this imaginary survey we would get a complete set of  $N$  types or sources of human satisfaction in the society under consideration. It is obvious, that the same things might be of greater importance for some individuals, while remaining unimportant for others.

Each economic agent  $i$  lives for  $T$  periods and in each period  $t$  he/she has an opportunity to choose some actions from a personal feasible set  $X_i(t)$ ,  $i = 1, 2, \dots, L$ ,  $t = 0, 1, 2, \dots, T$ . The fundamental assumption of the model is that this feasible set in each period of time characterizes individual's philosophy of life at a given stage. The latter means that this set consists only of those actions regarded as realizable intensions of a person related to his/her ideas of legitimate life in general.

Diversity of actions constituting one's life or more precisely knowledge about such actions is either inherited, that is known from the earliest stages of life, or acquired through learning, or otherwise is just imposed by social environment. Thus, it can undergo change as a consequence of various internal and external factors.

Each feasible action of individual  $i$  in period  $t$  (an element of the set  $X_i(t)$ ), such as, for example, to enter a university, to get a job in a banking sector, to get married, to visit art gallery or opera performance, etc. contributes (or not) to type  $j$ ,  $j = 1, 2, \dots, N$ , of human satisfaction in such a way that each action  $\mathbf{x}_i^k(t) \in X_i(t)$ ,  $k = 1, 2, \dots, K_i(t)$ , can be associated with  $N$ -dimensional vector  $(x_{1i}^k(t), x_{2i}^k(t), \dots, x_{Ni}^k(t))$ , which we interpret as contribution of this action to individual's happiness in a time period  $t$ .

One can easily reveal some analogy with Lancaster's approach to consumer theory (Lancaster, 1966): each good (action in our case) is identified with a set of its characteristics (contributions to various types of human satisfaction). For example, getting a prestigious job would probably provide an individual with self-esteem, confidence in the future, family approval, etc., entering a university gives self-certification, an opportunity to find new friends, to acquire knowledge and so on.

It is rather natural to presume that, first, in each period of his/her life individual can simultaneously (i.e. in the same period) make several actions (go to job, watch TV, get married, etc.); second, some actions from the feasible set can not be realized simultaneously; third, the contributions of various accomplished actions to type  $j$ , of human satisfaction should be summarized. One can easily go through the procedure of aggregating actions to obtain a new set  $\tilde{X}_i(t)$  of mutually exclusive actions  $\tilde{\mathbf{x}}_i^k(t) \in \tilde{X}_i(t)$  in a broad sense or aggregated actions associated with  $N$ -dimensional vectors of relevant contributions  $(\tilde{x}_{1i}^k(t), \tilde{x}_{2i}^k(t), \dots, \tilde{x}_{Ni}^k(t))$ , where  $i = 1, 2, \dots, L$ ,  $t = 0, 1, 2, \dots, T$ ,  $k = 1, 2, \dots, K_i(t)$ .

## 2.2. Happiness function

Let us look at happiness generation process or equivalently how the vector of feasible actions is converted to individual's happiness level. For the sake of brevity, we omit hereinafter the tilde notation referring to aggregation.

By analogy with Leontief production function we have the vector  $(x_1, x_2, \dots, x_N)$  as an input and the happiness level obtained by individual as an output. It can be assumed that the production (creation) of one 'unit' of happiness takes  $n_1, n_2, \dots, n_N$  'units' of corresponding sources of human satisfaction. Then we can formalize the individual's happiness function that relates each realization of an action  $\mathbf{x} \in X$  with corresponding happiness level as follows:

$$F(x_1, x_2, \dots, x_N) = \min \{l_1 x_1, l_2 x_2, \dots, l_N x_N\}, \text{ where } l_j = \frac{1}{n_j}, j = 1, 2, \dots, N. \quad (1)$$

Obviously, this relation is not injection in the general case. The weight coefficient vector  $(l_1, l_2, \dots, l_N)$  characterizes individual perceptions of different sources of satisfaction and can be considered as his/her attitude to life in a broad sense. It should be mentioned that the more important for individual some source of satisfaction is, the greater the corresponding coefficient  $n_j$  is and the lesser the weight coefficient  $l_j$  is. In other words, the higher valuation of concrete type of human satisfaction is associated with smaller value of the corresponding weight coefficient. Moreover, if any type of satisfaction is not relevant to individual, then  $n_j = 0$  and  $l_j = +\infty$ .

We stress that in our model heterogeneity of agents refers to enduring personal characteristics that are expressed in a particular pattern of life. More precisely, we formalize personality traits and different philosophies of life by associating personality with a specific weight coefficient vector and a personal set of feasible aggregated actions.

### 2.3. Maximization problem

Let us now discuss what happens with individual  $i$  in each period  $t$  of his/her life. We omit individual and time indices hereinafter, since they are considered to be fixed in this context. An individual possesses a certain attitude to life at a given period (weight coefficient vector)  $(l_1, l_2, \dots, l_N)$ , the set  $X$  of feasible aggregated actions and happiness function  $F(x_1, x_2, \dots, x_N) = \min \{l_1 x_1, l_2 x_2, \dots, l_N x_N\}$  that describes how to 'squeeze' the happiness out of a given aggregated action. Then individual in each period of his/her life solves the maximization problem:

$$F(x_1^k, x_2^k, \dots, x_N^k) = \min \{l_1 x_1^k, l_2 x_2^k, \dots, l_N x_N^k\} \rightarrow \max_{\mathbf{x}^k \in X}, \quad (2)$$

and as the result obtains happiness level (in terms of imaginary units) according to:

$$H = \max_{\mathbf{x}^k \in X} F(x_1^k, x_2^k, \dots, x_N^k) = \max_{\mathbf{x}^k \in X} \min_{j=1,2,\dots,N} \{l_j x_j^k\}. \quad (3)$$

What other aspects of human life should be also taken into account? Its naturally to allow a human being to shift his/her ground and to revise periodically his/her attitude to life. Some stylized facts documented by social scientists allow us to presume that individual's philosophy of life is imperturbable in some aspects while it is rather flexible in others. The former conservative or static part of human ideology of life covers basic foundations and moral principles of a person that is meaningful in personality characterization. The latter flexible part relates to transformations of mental attitude to life caused by influence of peers and social environment in a broad sense. Hence, some components of weight coefficient vector  $(l_1, l_2, \dots, l_N)$  can be considered as constant and the others as varying.

## 2.4. Impact of Social Interactions

It's reasonable to presume that an open-minded individual can apprehend commonly held views of his/her environs. An elimination of various ideological gaps is reflected by some transformations of the set of feasible aggregated actions as well as by evolutionary changes of flexible components of weight coefficient vector. These dynamical processes inevitably lead to qualitative changes in individual's happiness level.

Continuing the line of reasoning, let us describe the essence of transformation mechanism and state the key assumptions of the model relating to social interactions in the economy under consideration. For the sake of being definite, we assume that any fruitful in some sense interaction between two people may occur if and only if they have similar attitudes to life. Recall that in our model individual's philosophy of life in each period of time is associated with specific weight coefficient vector. Therefore, the test on similarity of two attitudes to life in our case requires two weight coefficient vectors to be compared. To be precise, we should say that two individuals have similar attitudes to life if and only if the magnitude of weight coefficient vectors difference is less or equal to some prescribed positive real number  $\rho$ . Formally, two individuals  $i_1$  and  $i_2$  with weight coefficient vectors  $(l_1^{i_1}, l_2^{i_1}, \dots, l_N^{i_1})$  and  $(l_1^{i_2}, l_2^{i_2}, \dots, l_N^{i_2})$  respectively,  $i_1, i_2 = 1, 2, \dots, L$ , are said to have similar attitudes to life with degree  $\rho > 0$  if and only if

$$\sqrt{\sum_{j=1}^N (l_j^{i_1} - l_j^{i_2})^2} \leq \rho. \quad (4)$$

If the inequality (4) holds for some  $\rho > 0$ , we should say that individuals  $i_1$  and  $i_2$  are  $\rho$ -similar in their philosophies of life. It should be mentioned, that parameter  $\rho > 0$  can be interpreted as tolerance index of the society in some sense, since  $\rho$  in our model characterize individual's willingness to accept new ideas and views of his/her environs.

Let  $\rho > 0$  be prescribed and consider two individuals  $i_1$  and  $i_2$  that are  $\rho$ -similar in the above mentioned sense. The interaction between them results, first, in updating of the sets of feasible actions due to the fact that the feasible set of each individual is augmented with some elements from the set of his/her counterpart that were previously beyond the reach of the individual, second, the transformation of flexible components of weight coefficient vectors occurs according to the following rule. Each individual  $m$ ,  $m = i_1, i_2$ , considers the convex combination of flexible weight coefficient vectors

$$\alpha l_f^{i_1} + (1-\alpha) l_f^{i_2} = (\alpha l_{N_f}^{i_1} + (1-\alpha) l_{N_f}^{i_2}, \alpha l_{N_f+1}^{i_1} + (1-\alpha) l_{N_f+1}^{i_2}, \dots, \alpha l_N^{i_1} + (1-\alpha) l_N^{i_2}), \quad (5)$$

where lower index  $j$ ,  $j = N_f, N_f + 1, \dots, N$ , refers to flexible components of weight coefficient vectors, then forms the updated weight coefficient vector

$$(l_1^m, l_2^m, \dots, l_{N_f-1}^m, \alpha l_{N_f}^{i_1} + (1-\alpha) l_{N_f}^{i_2}, \alpha l_{N_f+1}^{i_1} + (1-\alpha) l_{N_f+1}^{i_2}, \dots, \alpha l_N^{i_1} + (1-\alpha) l_N^{i_2}), \quad (6)$$

and finally chooses parameter  $\alpha$  as well as some aggregate action that belongs to renovated common feasible set of actions  $X^c$  as the solutions of maximization problem

$$\min \left\{ l_1^m x_1^k, l_2^m x_2^k, \dots, l_{N_f-1}^m x_{N_f-1}^k, \left( \alpha l_{N_f}^{i_1} + (1-\alpha) l_{N_f}^{i_2} \right) x_{N_f}^k, \right. \\ \left. \left( \alpha l_{N_f+1}^{i_1} + (1-\alpha) l_{N_f+1}^{i_2} \right) x_{N_f+1}^k, \dots, \left( \alpha l_N^{i_1} + (1-\alpha) l_N^{i_2} \right) x_N^k \right\} \rightarrow \max_{\substack{\mathbf{x}^k \in X^c \\ \alpha \in [0,1]}}. \quad (7)$$

The triumph step is to calculate the value of objective function and enjoy the relevant happiness level.

## 2.5. Relative Happiness Level

Let us take into account such characteristic property of subjective perception of happiness as ‘reference-point phenomena’. It’s obvious that individual evaluation of his/her present happiness level substantially depends on the events in the past. We suppose that each individual in each period  $t$  of life keeps in mind all happiness levels referred to previous  $M$  periods and calculates the base happiness level  $H^b(t)$  as follows:

$$H^b(t) = \frac{\sum_{i=1}^M \beta^i H(t-i)}{\sum_{i=1}^M \beta^i}, \quad (8)$$

where  $\beta$ ,  $0 < \beta < 1$ , is the discounting factor. Parameter  $M$  that defines ‘memory capacity’ and the discounting factor  $\beta$  that characterize the contribution of each period happiness level to the basic value are common constants for all individuals in the society. Finally, the relative happiness level in period  $t$  is defined as the difference between the present happiness level and the base:  $H(t) - H^b(t)$ .

## 3. SIMULATION EXERCISE

In this section we discuss a simulation exercise where the outlined model is put into action. We first describe the parameter values assigned at the beginning of a simulation. Then we outline the way how a recurring procedure of social interaction is simulated in each period. And, finally, we present the dynamic picture of how simulated levels of happiness were changing throughout the whole simulated time interval.

In our simulated model there are  $L=10$  individuals starting their journey throughout the lifelong pursuit of happiness at the same initial period,  $t=0$ . There are  $T=100$  of simulated periods in total. In initial period, a weight coefficient vector where each element is a real number drawn uniformly at random from an interval  $[0,1]$  is prescribed to each individual. We fix the number of such elements, i.e. the number of personal characteristics composing a comprehensive attitude to life, as well as the number of corresponding types or sources of human satisfaction, and equivalently the number of action’s characteristics, to  $N=6$ . Each individual is also assigned initial feasible set of actions,  $X_i(0)$ , consisting of 2 actions, i.e.

$K_i(0)=2, \forall i$ . The numerical values of actions’ characteristics are the real numbers drawn uniformly at random from an interval  $[0,1]$ .

As it was discussed earlier, each individual might be affected by external influence of experienced social interaction. We assume that only one interaction, i.e. accidental acquaintance, might occur in the society per period. Thus, the pair of two distinct individuals is randomly chosen out of the population in each period. The threshold value of closeness

measure,  $\rho$ , for which an accidental acquaintance would lead to an exchange of attitudes and actions is defined as follows:

$$\rho = (1 - \theta) \sqrt{N}, \quad (9)$$

where  $\theta$  might be referred to as a degree of ‘openness to communication’, and  $(1 - \theta)$  would be oppositely interpreted as an ‘social suspiciousness’;  $\sqrt{N}$  is simply the maximum possible length (norm) of distances between any two weight coefficient vectors, which is implied from the fact that elements of each vector vary in  $[0, 1]$ . We set  $\theta = 0.4$  to ensure a relative frequency of exchanges to be around 20% out of all randomly assigned interactions, which might be a plausible assumption about people’s average ‘openness to communication’.

Therefore, if condition of exchange is satisfied with current attitudes to life, each individual involved into such exchange updates his/her feasible set of actions and weight coefficient vector, but only partially. As one of the stylized facts mentioned earlier in this paper suggests, about half of our personality characteristics are subject to change, i.e. only 3 elements of the vector are kept varying.

In each period, after possibility of exchange is realized, personal feasible sets and weight coefficient vectors are updated according to (6), individual’s level of happiness is obtained according to (3) and (7) and recorded in absolute terms (Figure 1) and relative to internal reference point defined as in (8), where a discounting factor is set to  $\beta = 0.9$  and memory capacity – to  $M = 10$ . We also set the ‘burn-in’ period of simulation to 10, i.e. not including the first 10 records of relative levels of happiness into the final output (Figure 2).

On top of the simulated paths of each individual throughout their pursuits of happiness we also introduce some random disturbances. Each 5<sup>th</sup> period of the simulation a randomly chosen individual is prescribed to a choice of a randomly picked action out of the union of all distinct actions known in the society. Since such disturbances might potentially lead to drops in happiness levels, we assume that relative valuation of a loss is twice as great as valuation of a gain which is in line with findings by Kahneman and Tversky (2000). Outputs expressed in absolute and relative terms are presented in Figure 3 and 4 respectively.

#### 4. CONCLUSION

About forty years ago, interest in analysis of people’s happiness has been revived in economic literature. This strand of research has raised one the most important questions in a history of mankind – Where does a continuous pursuit of happiness lead us? We contribute to this research by constructing a formal model of individual’s pursuit of happiness built on a set of stylized facts from cross-disciplinary studies on happiness.

In response to the question of how actually a human happiness is attained, we referred to an ancient philosophy where it was seen as an indirect byproduct of virtuous actions. Personal preferences over such actions and perception of their virtuousness are considered in our model to be changeable, at least partially, which is in line with a significant body of the literature showing that our tastes are continuously influenced by various internal and external factors.

We formalize an influence that personality traits composing a comprehensive attitude to life might have on our choice of actions and consequently attained level of happiness by introducing a Leontief-type happiness function where a weight coefficient vector reflects each individual’s personality traits. Impact of social environment on individual’s attitude to life, his/her attainment of happiness is modeled as a reciprocal exchange of feasible actions and adjustment of weight coefficient vectors resulting from accidental acquaintances among people.

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## LITERATURE

1. Asch, S. E. (1955). Opinions and social pressure. *Scientific American* (pp. 31-35). San Francisco: W. H. Freeman and Company.
2. Becker, G. (1996). *Accounting for tastes*. Cambridge: Harvard University Press.
3. Bentham, J. (1789). *An Introduction to the Principles of Morals and Legislation*. Oxford: Clarendon Press.
4. Brock W. A., Durlauf, S. N. (2001). Discrete choice with social interactions. In K. Storesletten (ed.), *The Review of Economic Studies* (pp. 235-60). Stockholm: The Review of Economic Studies Ltd.
5. Bruni, L., Porta, P. L. (2007). Introduction. In L. Bruni (ed.), In L. Bruni (ed.), *Handbook on the economics of happiness* (pp. xi-xxxvii). Cheltenham, UK: Edward Elgar.
6. Bruni, L., Porta, P. L. (2008). Economics and Happiness: Framing the Analysis. In F. Cowell et al. (eds.), *Economica* (pp. 394-95). New Jersey: Wiley.
7. Carlyle, T. (1850). *Letter-day pamphlets*. London: Chapman & Hall. □
8. Clark, A. E., Frijters, P., and Shields M. A. (2008). Relative income, happiness, and utility: an explanation for the Easterlin paradox and other puzzles. In S. Durlauf (ed.), *Journal of Economic Literature* (pp. 95-144). Pittsburgh: American Economic Association Publications.
9. Diener, E., Scollon, C., and Lucas, R. (2004). The evolving concept of subjective well-being: the multifaceted nature of happiness. In P. T. Costa, I. C. Siegler (eds.), *Advances in cell aging and gerontology* (pp. 187-220). Amsterdam: Elsevier.
10. Easterlin, R. (1974), Does economic growth improve the human lot? Some empirical evidence. In P. A. David, M.W. Reder (eds.), *Nations and Households in Economic Growth: Essays in Honor of Moses Abramowitz* (pp. 89-125), New York; London: Academic Press.
11. Easterlin, R. (2001). Income and happiness: towards a unified theory. In M. Cripps et al. (eds.), *Economic Journal* (pp. 465-84). Oxford, England; Malden, USA: Blackwell Publishers.
12. Frank, R. (2005). Does absolute income matter? In L. Bruni, P. L. Porta (eds.), *Economics and Happiness* (pp. 65-91). Oxford: Oxford University Press. □
13. Frey, B., Stutzer, A. (2000). Maximising happiness? In B. Felderer et al. (ed.), *German Economic Review* (pp. 145-67). Oxford, England; Malden, USA: Blackwell Publishers.
14. Frey, B., Stutzer, A. (2005). Testing theories of happiness. In A. C. Michalos (ed.), *Social Indicators Research* (pp. 1-27). Berlin: Springer. □
15. Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology* (pp. 1360-80). Chicago: University of Chicago Press.
16. James, W. (1902). *Varieties of religious experience*. New York: Barnes & Noble.
17. Kahneman, D., Tversky, A. (2000). *Choices, values and frames*. New York: Cambridge University Press.
18. Lancaster, K. J. (1966). A new approach to consumer theory. In H. Uhlig (ed.), *The Journal of Political Economy* (pp. 132-57). Chicago: The University of Chicago Press.
19. Layard, R. (2005). Rethinking public economics: the implications of rivalry and habit. In L. Bruni, P. L. Porta (eds.), *Economics and Happiness* (p. 147). Oxford: Oxford University Press.
20. Powdthavee, N. (2007). Economics of happiness: a review of literature and applications.

In T. Potipiti (ed.), *Chulalongkorn Journal of Economics* (pp. 51-73). Bangkok: Faculty of Economics, Chulalongkorn University.

21. Scitovsky, T. (1976). *The joyless economy: an inquiry into human satisfaction and consumer dissatisfaction*. Oxford: Oxford University Press. □
22. Vivenza, G. (2007). Happiness, wealth and utility in ancient thought. In L. Bruni (ed.), *Handbook on the economics of happiness* (pp. 3-23). Cheltenham, UK: Edward Elgar.
23. Weimann, J., Knabe, A., and Schöb, P. (2015). *Measuring happiness. The economics of well-being*. Cambridge, Massachusetts; London, England: The MIT Press.

## APPENDIX

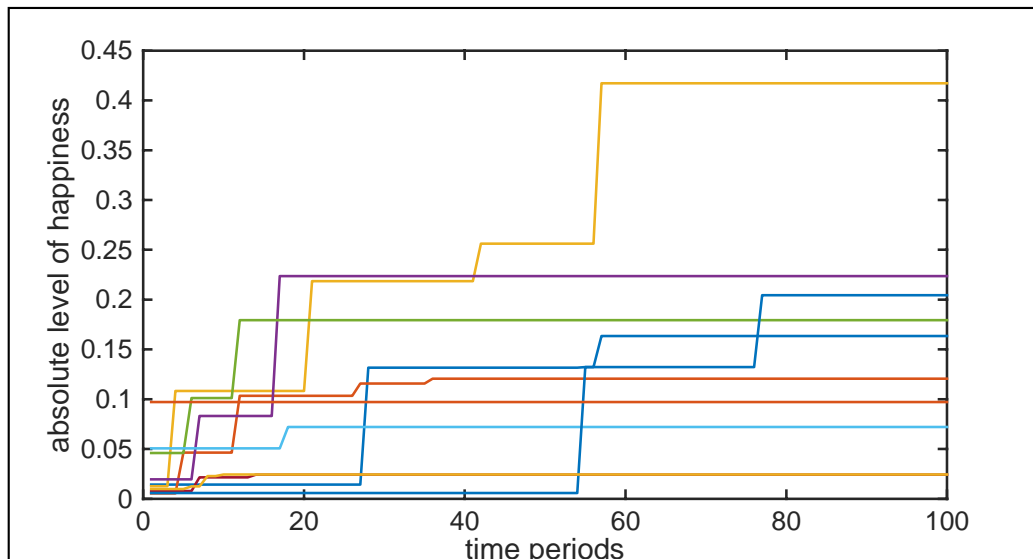


Figure 1: Absolute level of happiness, simulated (Authors' illustration)

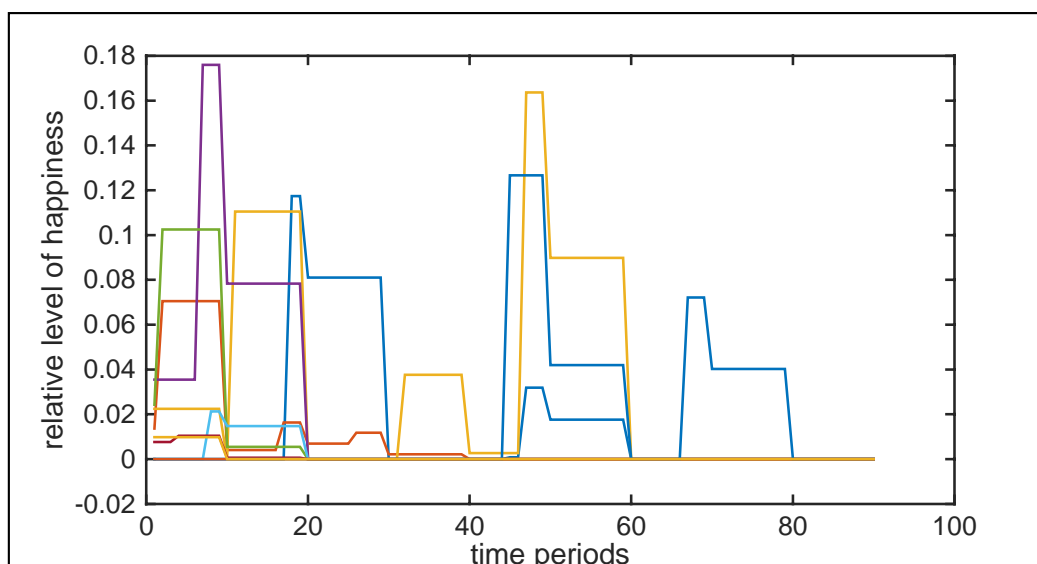


Figure 3: Relative level of happiness, simulated (Authors' illustration)

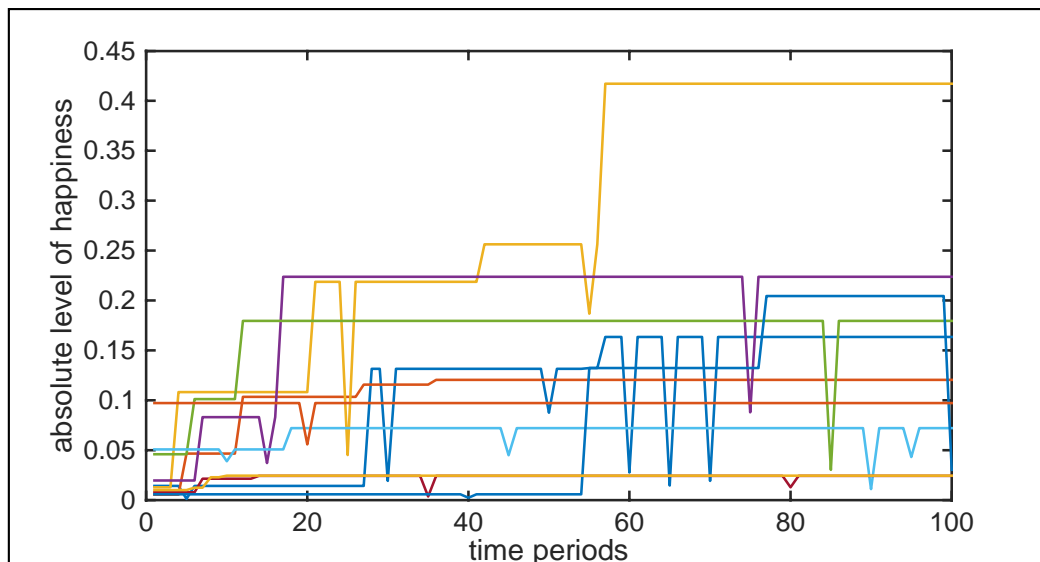


Figure 4: Absolute level of happiness, simulated with shocks (Authors' illustration)

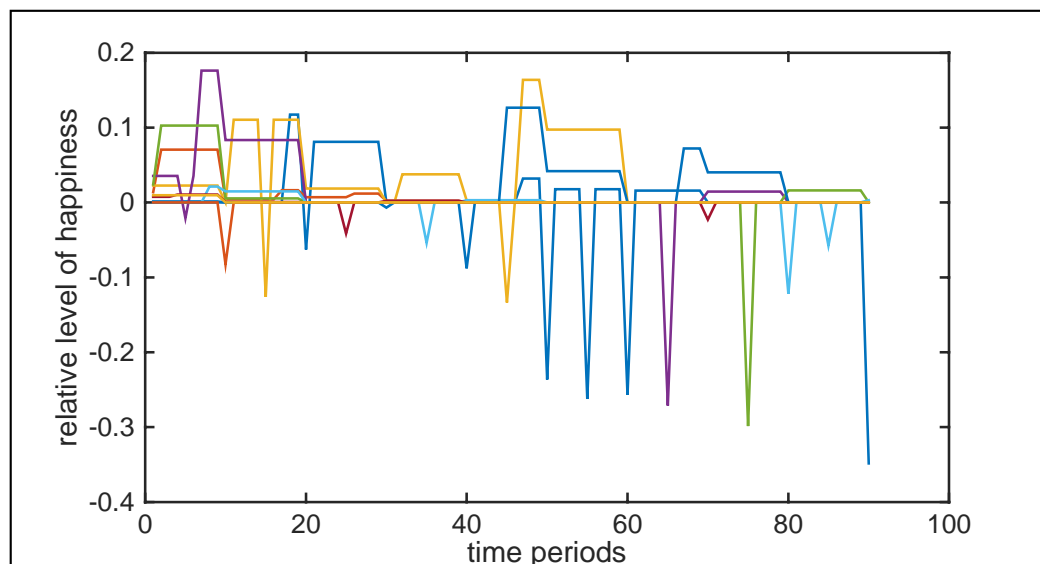


Figure 5: Relative level of happiness, simulated with shocks (Authors' illustration)



## WHAT FIRMS ARE REWARDED AFTER GLOBAL FINANCIAL CRISIS? THE ROLE OF INNOVATION AND GLOBALIZATION STRATEGIES IN RECOVERY

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### **ABSTRACT**

*The aim of the research is to conduct an empirical investigation and reveal what types of globalization and innovation strategies in turbulent and unfavorable regional institutional environment are most likely to be associated with different trajectories of Russian manufacturing firms' performance in 2007-2012. We employ the results of empirical survey of 1000 medium and large enterprises in manufacturing (2009) linked to financial data from Amadeus database and the data on the regional institutional environment. We test that (1) introduction of innovations before the crisis ceteris paribus helped the firms to successfully pass the crisis and recover. We expect that (2) companies that became globalized before the crisis (via importing of intermediate and capital goods; exporting; FDI; establishment of partner linkages with foreign firms) ceteris paribus are more likely to successfully pass the crisis and grow. And (3) propose the positive effect of synergy of innovation efforts and globalization strategy of the firm. We expect that the abovementioned factors are complimentary and reinforce the ability of the firm to recover after crisis shock. We found strong support for the hypothesis that firms financing introduction of new products before the crisis and simultaneously managed to promote and sell them on the global market were rewarded by quick return to the growing path after global crisis. Other strategies, i.e. solely innovations without exporting play insignificant role while exporting without attempts to introduce new products contribute even negatively to post-crisis recover. Institutional environment also matters: in the regions with less level of corruption firms were more likely to grow after the crisis.*

**Keywords:** *firm performance; globalization; innovation; manufacturing firms; strategy*

### **1. INTRODUCTION**

While studies of determinants of firms' growth always have been in the focus of both theoretical and empirical research, the Economic Crisis of 2008-2009 being a major shock to most of the countries has motivated studies aimed at revealing factors of sustainability of firms' performance. For Russian economy assessment of sustainability is specifically interesting as for quite a long time Russia enjoyed almost a decade (1999-2008) of high and stable rates of growth. Favorable macroeconomic conditions on one hand provided opportunities for growth and modernization for Russian firms. In particular, during the period of growth a lot of Russian firms became more open to the World, increased participation in the foreign trade, acquired foreign co-owners, build up their international partnerships, etc. Though, on the other hand, high rates of economic growth, relatively easy access to external financing, etc. softened up budget constraints and slowed down the processes of "constructive destruction", i.e. crowding out of less efficient firms by more efficient. Thus, the relatively high level of heterogeneity in

terms of productivity and other performance indicators, in particular in Russian manufacturing persisted (Gonzalez et al, 2013).

Russian manufacturing has been strongly hit by the crisis of 2008-2009 and manufacturing has been hit harder than other industries. During the acute phase of the crisis (in Russia it continued since the last quarter of 2008 till the second quarter of 2009) the drop of production in manufacturing was about 16%, comparing, for example, to about 5% in agriculture and trade. The recovery measured at macroeconomic level was comparatively quick and the industrial production reached the pre-crisis level. Still, after 2010 the growth rates in manufacturing began to decline and by the end of 2013 fell to near zero level.

This paper mostly focuses on the consequences of the crisis for more globalized firms, which has been prior to the crisis more active in different international activities. We are interested in verifying the hypothesis that active globalization at a firm level facilitates the performance during the crisis and post-crisis recovery period using the integrated database of the survey data and objective statistics.

## **2. DATA, METHODOLOGY AND EMPIRICAL STRATEGY**

We use several data sources for our research. The main source of empirical data comes from results of large-scale empirical survey about of 1000 medium and large enterprises in 8 two-digit manufacturing industries (by NACE code) conducted by face-to face interviews with top-managers in more than 40 Russian regions in 2009 (for detailed description of the database see Kuznetsov *et al.* 2011). The questionnaire covers a variety of issues on competitiveness and behavior patterns of firms, including their internationalization and innovation activities in pre-crisis period of 2006-2008, i.e. – export propensity and geographical structure of exports, importing of intermediaries and equipment, availability of foreign strategic partners, financing of new product development in 2008. The initial survey data were linked to RUSLANA/Amadeus data on firms' sales. As only the firms with reported data for all years in 2007-2012 time period were included into the analysis the initial sample reduced to 670 observations.

As a measure of firms' growth we use an indicator of sales in 2007-2012 deflated by price indexes for the selected 2-digit industries in order to capture price-shocks due to global crisis. In our previous research using the procedure of hierarchical cluster analysis applied to the general population of Russian medium and large manufacturing firms as well as to our sample we revealed four stable clusters describing different trajectories of firms' growth in 2007-2012 (Ermilova et al, 2015). The sales for each firm are standardized using Z-scores (Z-values) in relation to the average sales amount for the specific companies for the total period of 2007-2012. As a result of the clustering procedure four stable clusters of crisis and post-crisis trajectories of the standardized output have been selected. Among them 92% of firms got into two large clusters. First cluster consists of firms with a classical V-type growth trajectory - decline in the crisis year of 2009 and then quick recovery and return to the growth path. Second cluster consists of firms which after the fall of sales in crisis have not managed to recover to pre-crisis levels (L-type trajectory). In the sample these two clusters cover 32% and 60% of firms, correspondingly, and they are the objects of our research.

In this paper we, first, test our hypotheses on the effects of firms' internationalization strategies before the beginning of the global crisis of 2008-2009 on the probability of quick recovery and post-crisis sustainable growth. We explore a variety of internationalization strategies which the firm could follow: exporting, importing of intermediaries or equipment, establishment of strategic partnerships with foreign partners or FDI of foreign co-owner. We take in to consideration several important characteristics of exporting: the possibility of its non-linear effect of firms' growth during recession, the impact of geographical destination (CIS countries vs non-CIS countries) and the product scope of exporting, i.e. whether the firm had financed

introduction of new products to the market in pre-crisis period. We treat this fact as a proxy for possibility to export advanced products for more demanding customers. We also took into consideration the location of the enterprise in terms of socio-economic and institutional diversity of Russian regions and urban settlements. Both characteristics reflect different possibilities of recovery: inter-regional differences in structural diversity of Russian regional economy, the great inequality in per capita domestic product provide unequal opportunities for post-crisis growth of the economy. The location of firms taken into consideration: according to estimations of economic geographers (Nefedova et al, 2010) only cities with population of 250, 000 and above (majority of oblast-level regional centers) were well positioned to meet the challengers of crisis. An importance of heterogeneity in the regional institutional environment in Russia due to the variation of local regulation, different economic policies pursued by local authorities, the quality of institutions (e.g. the level of corruption), etc. also is taken into consideration. The strong negative influence of corruption on both innovation capacity and performance of Russian firms was highlighted in the literature (Chadee and Roxas, 2013). In this paper we test three main hypotheses. Our first hypothesis links the dynamics of sales growth with innovation activity which the literature in line with Shumpeterian view suggest to be one of the main determinants of firm's growth (Aghion et al, 2015; Coad, 2009; Geroski and Machin, 1992; Geroski and Toker, 1996; Hall and Mairesse, 2006). Though the economic crisis had a significant negative impact on innovation activity of Russian firms this impact was less pronounced for the firms pursuing the strategy of new product development in contrast to the firms involved in gradual improvement of products and processes (Kuznetsov & Simachev, 2010). So, we expect that:

***H1: Financing of new product development before the crisis ceteris paribus helped the firms to successfully pass the crisis and recover.***

Our second hypothesis propose that internationalization activities of the enterprises in pre-crisis period (exporting, importing of intermediaries and equipment, establishing of strategic partnerships with foreign partners and availability of foreign co-owner) matter for the speed of recovery. Internationalization strategies of We presume that according to self-selection of better performing firms to exporting and importing driven by the costs of internationalization (Melitz, 2003; Melitz and Redding, 2012), they could be more successful than locally oriented firms in coping with crisis and exhibit faster recovery.

Keeping in mind that foreigners initially bought more efficient firms (Sabirianova et al, 2012; Fons-Rosen et al. 2014) and that foreign-owned firms and local internationalized firms are, in general, more productive (Helpman et al, 2003), manufacturing firms with foreign ownership on the average were found to be more successful in overcoming the crisis (Alfaro and Chen 2012, Kolasa et al. 2010, Varum and Rocha 2011).

However, these potential advantages could disappear due to global character of the crisis and in case the main firm's markets suffered more than others internationalization could become a disadvantage (Burger et al, 2014), especially if a large share of sales goes to the global market.

***H2: companies that became globalized before the crisis (via importing of intermediate and capital goods; exporting; FDI; establishment of partner linkages with foreign firms) ceteris paribus are more likely to successfully pass the crisis and grow.***

Our third hypothesis proposes the positive effect of synergy of innovation efforts and globalization strategy of the firm. High-productivity plants were found to be more likely to self-select into both R&D and exporting (Aw et al, 2011) while the direction of this link is not clear: there is an evidence that both exporting and importing induce innovations in developed and transition countries (Gorodnichenko et al, 2009; Altomonte et al, 2013; Golikova et al, 2012; Gonchar and Kuznetsov, 2015) and that product and process innovation might drive exports at firm level (Cassiman and Golovko 2011). The effect of synergy between exporting and

innovation was found to be significant in terms of future productivity and survival of firms (Castellani and Zanfei, 2007; Aw et al, 2011; Ito and Lechevalier, 2010) and we expect it to be positively correlated with growth opportunities of firms as well:

***H3: companies involved in product innovation and exporting before the crisis are ceteris paribus more likely to follow V-type trajectory of growth.***

Descriptive statistics for V-type and L-type clusters of firms is presented in Table 1.

*Table 1: Descriptive statistics*

Indicator	“V”-cluster	“L”-cluster
<b>Internationalization factors</b>		
Share of export in revenues in 2008, %	7.63	8.36
Share of imported raw materials/components in total materials/components purchase in 2008,%	17.26	16.17
Imported equipment in total purchased equipment in 2008	64.2	56.5
New foreign strategic partners	24.5	18.5
<b>Geographical structure of firm exports</b>		
No export	50.9	51.5
More than 90% of export to CIS	29.7	30.8
More than 90% to non CIS	5.7	4.0
Both CIS and non-CIS destinations	13.7	13.8
<b>Innovation factors</b>		
Financed new product development in 2008	58.0	48.3
<b>Productivity</b>		
Sales per employee to industry's median value ratio	1.68	1.56
<b>Ownership</b>		
Foreign co-owned	0.150	0.083
State-co-owned enterprise	0.053	0.039
<b>Regional economy</b>		
Gross Regional Product per capita, 2008, thous. Rub.	25.3	24.9
Share of manufacturing in GRP, %	0.311	0.299
<b>Regional institutional environment</b>		
Bribery in the region (the component of everyday corruption index)	0.474	0.491
Number of employees in 2007	623.1	586.6
Observations	212	400

Source: Authors' calculations based on survey data, Rosstat regional statistics (Rosstat, 2009; Petrov and Titkov (2013), POF (2011)).

### 3. THE ECONOMETRIC MODEL AND ESTIMATION RESULTS

In all specifications the dependent variable that is the probability for a firm to find itself in V-type cluster, described in the previous section (i.e. the probability for a firm to successfully overcome the crisis and to return quickly to the growing path). This dummy variable takes value “1” for enterprises, that are classified as firms that recovered quickly (V-type cluster) and value “0” for companies with L-type dynamics of sales.

The regression equation takes the following form:

$$Pr(Crisis\_success) = \alpha * Xi + \beta * Individ\_controls + \gamma * Sectoral\_controls + \\ + \delta * Regional\_controls + \mu * Location\_controls + \eta * Institutional\_controls + \varepsilon$$

where  $Xi$  is a set of key explanatory variables (dummy for financing of product innovation before crisis and a set of internationalization indicators), dummy variables for characteristics of ownership to verify the role of foreign ownership);

*Individ\_controls* represents the set of firm-level control variables (participation in the business group; firm's size groups and labor productivity in 2007 measured as logarithm ratio of individual level to sample industry median level).

*Sectoral\_controls* represents 2-digit industry dummies, *Location\_controls* – is a dummy variable for regional capitals (including Moscow and St.Petersburg).

*Regional\_controls* represents the set of regional control variables, such as regional fixed effects, the logarithm of Gross Regional Product (GRP) per capita, region size or structure of the regional economy evaluated as the share of manufacturing industries in GRP in 2008.

*Institutional\_controls* represents the regional level of corruption measured as level of bribery -a subcomponent of everyday corruption index (Petrov and Titkov, 2013; POF, 2011).

The coefficients of the equations were estimated by binary probit regressions with robust standard errors clustered by regions. For robustness checks we incorporated the age of the firm grouped at categories before 1991; 1992-1998 and after 1999 as this characteristic is treated to be significant in the empirical analysis of firm's growth determinants (Burger et al, 2014; Geroski and Gugler, 2004; Coad et al, 2012; Navaretti et al, 2012).

Table 2: Results of the Estimation of Firm Internationalization's Effect on the "V"-type growth trajectory

Dependant variable: "V"-type cluster	(1)	(2)	(3)	(4)
VARIABLES				
NEW_PRODUCT08	0.331*** (0.091)	0.129 (0.143)	0.125 (0.142)	0.069 (0.160)
EXPORT_SHARE08	-0.793 (0.523)	-7.894*** (1.583)	-7.906*** (1.576)	-6.496*** (1.580)
_INEXPOR_1		5.696*** (2.012)	5.699*** (1.987)	4.809** (2.018)
EXPORT_SHARE_SQ08		10.77*** (2.545)	10.76*** (2.488)	8.465*** (2.333)
_INEXPORa1		-8.410*** (3.226)	-8.381*** (3.152)	-6.761** (3.162)
SHARE_IMP_RAW08	0.100 (0.256)	-0.276 (0.582)	-0.185 (0.584)	0.018 (0.785)
SHARE_IMP_RAW_SQ		0.574 (0.786)	0.513 (0.778)	0.007 (0.988)
SHARE_IMP_EQ08	0.128 (0.150)	0.132 (0.161)	0.133 (0.160)	0.057 (0.228)
_IEXP_BY_DE_1	0.002 (0.167)	0.267 (0.199)	0.260 (0.198)	0.277 (0.224)
_IEXP_BY_DE_2	0.429 (0.354)	0.642* (0.345)	0.647* (0.348)	0.817** (0.387)
_IEXP_BY_DE_3	4.68e-05 (0.221)	0.331 (0.253)	0.330 (0.253)	0.272 (0.326)
NEW_FOR_STRAT_PART	0.257* (0.145)	0.276* (0.150)	0.281* (0.155)	0.276* (0.162)
HOLDING	0.159 (0.174)	0.130 (0.178)	0.121 (0.182)	0.070 (0.188)
FOREIGN_OWN08	0.271 (0.228)	0.229 (0.241)	0.222 (0.236)	0.240 (0.247)
STATE_OWN08	-0.051 (0.281)	-0.031 (0.290)	-0.053 (0.293)	-0.023 (0.273)
LOG_SALES_MED_RATIO07	0.102 (0.079)	0.081 (0.081)	0.090 (0.090)	0.024 (0.093)
_IGR_SIZE07_1	0.044 (0.274)	0.071 (0.282)	0.074 (0.280)	-0.274 (0.288)
_IGR_SIZE07_2	0.051 (0.281)	0.119 (0.293)	0.106 (0.287)	-0.199 (0.308)
_IGR_SIZE07_3	-0.040 (0.293)	0.003 (0.303)	-0.011 (0.293)	-0.383 (0.301)
_IGR_SIZE07_4	-0.199 (0.299)	-0.143 (0.292)	-0.172 (0.291)	-0.504 (0.329)
BRIBES_A	-0.0172** (0.007)	-0.0172** (0.007)	-0.0168** (0.007)	-0.0196** (0.008)
REG_GRP_PC	0.000687 (0.00493)	0.002 (0.005)	0.002 (0.005)	0.003 (0.005)
REG_MANUF_SHARE	0.001 (0.007)	0.003 (0.007)	0.003 (0.007)	0.002 (0.007)
REG_CAPITAL_A	0.091 (0.143)	0.078 (0.144)	0.089 (0.147)	0.125 (0.141)
_Iage_3cat_2			-0.185 (0.237)	-0.154 (0.229)
_Iage_3cat_3			-0.006 (0.205)	0.082 (0.257)
INVEST_08_LOW_A				0.015 (0.178)
INVEST_08_HIGH_A				0.401* (0.211)
RESTR_BUSINESS_PROC				0.306** (0.149)
JOB_CREATOR				0.368** (0.150)
Industries controlled				
Constant	0.0350 (0.521)	0.038 (0.529)	0.049 (0.531)	0.112 (0.612)
Pseudo Rsq	0.0643	0.082	0.084	0.127
Observations	507	507	507	454

\*\*\* - p<0.01; \*\* - p<0.05; \* p<0.1 Robust standard errors in parentheses

Source: Authors' calculations based on survey data

The results for different model specifications in Table 2 allows for several conclusions. First, we see that a straightforward attempt (Model 1) at catching the effect of different globalization indicators on the probability for a firm to have a V-type trajectory (i.e. fast post-crisis recovery) fails. The scale of participation in international trade (either by export or by importing raw materials/components) seems not to have any impact on the type of the trajectory. The existence of foreign investor (co-owner) also does not increase the chances for quick recovery. Only the acquirement of foreign strategic partner is important. Though, as further analysis shows, this "no globalization effect" result is due to non-linear relationship between the participation in foreign trade (in particular, export) and chances for quick recovery trajectory. In all other specifications (Models 2-4) we find strong evidence of that non-linearity. If the share of export

revenues is not high the larger share of export lower down chances for the recovery, while starting from certain value the increase of export revenues share lead to higher probability for a firm to belong to V-type cluster. This non-linear effect may be due to different type of products firm produces and/or to difference in geography of export: a firm producing more innovative products and selling to more developed (and, thus, more demanding) markets should have comparative advantage during the crisis. And the results of Model 2 supports this presumption: the coefficient at cross-term between innovation dummy and the share of export revenues is positive and highly significant statistically. As well as “far abroad” export destination: the coefficient at the dummy for group of companies selling predominantly to non-CIS countries is positive and significant though the significance is not very high. Models 3 shows that the abovementioned results are robust as the inclusion of additional variable of firms age (in some cases there may be a distinct difference between old “Soviet” enterprises, forms created during the privatization of the 90-ies and young firms) does not change the main findings. In Model 4 we control our results on possible “self-selection” effect for firms which were active in restructuring and modernization prior to the crisis (this effect has been found in our previous research). We see that while active modernization do increase the chances for a firm to get into V-type trajectory cluster this does not change other results: non-linear relation with share of export revenues, positive impact of being an innovator and positive impact of selling to more advanced markets (i.e. to non-CIS countries).

#### 4. CONCLUSION

We found a strong support for the hypothesis that firms that introduced new products before the crisis and simultaneously managed to promote and sell them on the global market were rewarded by quick return to the growing path after global crisis. Other strategies, i.e. solely innovations without exporting play insignificant role while exporting without attempts to introduce new products contribute even negatively to post-crisis recover. Institutional environment also matters: in the regions with less level of corruption firms were more likely to grow after the crisis.

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#### LITERATURE

1. Aghion, P., Akcigit, U., & Howitt, P. (2015). The Schumpeterian Growth Paradigm. *Annu. Rev. Econ.*, 557-575.
2. Alfaro, L. and Chen, M.X., 2012. Surviving the global financial crisis: foreign ownership and establishment performance. *American Economic Journal: Economic Policy*, 4 (3), 30-55.
3. Altomonte, C., Aquilante, T., Gábor Békés and Ottaviano G.I.P. (2013). Internationalization and Innovation of Firms: Evidence and Policy, *Economic Policy*, Volume 28, Issue 76, 663–700.
4. Aw, B., Roberts, M., & Xu, D. (2011). R&D Investment, Exporting, and Productivity Dynamics. *The American Economic Review*, American Economic Association, Vol. 101(4), 1312-44.
5. Burger, A., Damijan, J., Kostevc, C. and Rojec. M., 2014. Determinants of firm performance and growth during economic recession: the case of Central and Eastern European countries. *Discussion Paper 43*, July, KU Leuven.
6. Cassiman, B., & Golovko, E. (2011). Innovation and Internationalization through Exports. *Journal of International Business Studies*, 42(1), 56-75.

7. Castellani, D., & Zanfei, A. (2007). Internationalisation, Innovation and Productivity: How Do Firms Differ in Italy? *The World Economy*, Vol.30, Issue 1, 156-176.
8. Chadee, D., & Roxas, B. (2013). Institutional Environment, innovation capacity and firm performance in Russia. *Critical Perspectives of International Business*, 9 (1), 19-39.
9. Coad, A., 2009. *The growth of firms: a Survey of theories and empirical evidence*. Edward Elgar Publishing: Cheltenham.
10. Coad, A., Segarra, A., & Teruel, M. (2013). Like milk or wine: Does firm performance improve with age? *Structural Change and Economics Dynamics*, 24(1), 173-189.
11. Dosi, G., Lechevalier, S., & Secci, A. (2010). Interfirm heterogeneity - nature, sources and consequences for industrial dynamics. *Industrial and Corporate Change*, 19 (6), 1867-1890.
12. Ermilova, G.A., Golikova, V.V., Korotkov, M.Ju. ( 2015) Metodologija tipizatsii trajektorij postkrizisnoj dinamiki rossijskih predpriyatij obrabatyvajashej promyshlennosti. *Voprosy Statistiki*, №9, 30-38. (in Russian)
13. Fons-Rosen, Ch., Kalemli-Ozcan, S., Sorensen, B.E., Villegas-Sanchez, C., Volosovych, V., 2014. Foreign Ownership, Selection, and Productivity. CompNet, Working Paper, March [online]. Available from:  
[https://www.ecb.europa.eu/home/pdf/research/compnet/20140630/Fons\\_Rosen\\_paper.pdf?3977398243475f3d3ea6da6449ad9356](https://www.ecb.europa.eu/home/pdf/research/compnet/20140630/Fons_Rosen_paper.pdf?3977398243475f3d3ea6da6449ad9356)
14. Geroski, P.A. and Machin, S. (1992) Do innovative firms outperform non-innovators? *Business Strategy Review*, (Summer), 79-90.
15. Geroski, P.A. and Toker, S. (1996). The turnover of market leaders in UK manufacturing industry, 1979-86., *International Journal of Industrial Organization*, 14, 141-158.
16. Geroski, P.A. and Gugler, K. (2004). Corporate Growth Convergence in Europe, *Oxford Economic Papers*, 56, 597-620.
17. Golikova, V.V., Gonchar, K.R., Kuznetsov, B.V. (2012). Vlijanie eksportnoj dejatel'nosti na tekhnologicheskie b upravlencheskie innovatsii rossijskih firm. *Russian Journal of Management*, vol. 10, №1, 3-28. (in Russian)
18. Gonchar K. R., Kuznetsov B. V. How import integration changes firms' decision to innovate. *The Annals of Regional Science*. 2015, 847-874.
19. Gonzalez, A., Iacovone, L. and Subhash, H., 2013. Russian volatility. Obstacle to firm survival and diversification. Policy Research, Working Paper 6605, September.
20. Gorodnichenko, Y., Svejnjar, J., & Terrell, K. (2009). Globalization and Innovation in Emerging Markets. *American Economic Journal: Macroeconomics*, American Economic Association, vol. 2(2), 194-226.
21. Hall, B. and Mairesse, J. (2006). Empirical studies of innovation in the knowledge-driven economy. *Economics of Innovation and New Technology*, 15, 289-299.
22. Helpman, E., Melitz, M.J. and Yeaple, S.R. (2003). Export versus FDI. NBER Working Paper No. 9439. NBER: Cambridge, MA.
23. Ito, K., & Lechevalier, S. (2010). Why some firms persistently out-perform others: investigating the interactions between innovation and exporting strategies. *Industrial and Corporate Change*, 1997-2039.
24. Kolasa, M., Rubaszek, M., Taglioni, D., 2010. Firms in the global recession: the role of foreign ownership and financial dependence. *Emerging Markets Review*, 11, 341-357.
25. Kuznetsov, B., Dolgopyatova, T., Golikova, V., Gonchar, K., Yakovlev, A., Yasin, Ye., 2011. Russian Manufacturing Revisited: Industrial Enterprises at the Start of the Crisis. *Post-Soviet Affairs*, 27 (4), 366-386.
26. Kuznetsov, B., & Simachev, Y. (2010). Impact of economic crisis on innovation behaviour of industrial firms in Russia. Interdepartmental Analytical Center.



26. Melitz, M. (2003). The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity. *Econometrica* 71 (6), 1695-1725.
27. Melitz, M. and Redding, S. (2012). Heterogeneous firms and Trade. NBER Working Paper № 18652, Washington, D.C.
28. Navaretti, G., Castellani, D., & Pieri, F. (2012). The role of age in shaping firms' size dynamics: "learning" effects or willingness to grow? EFIGE Working Paper 60, 1-29.
29. Nefedova, T.A., Treyvish, A.I. and Pallot, J. (2010) The "crisis" Geography of contemporary Russia. *Eurasian Geography and Economics*, 51(2), 203-217.
30. Petrov, N.V. and Titkov, A.S. Rejting demokratichnosti regionov Moskovskogo Centra Karnegi: 10 let v stroju. Moscow: Moscow Carnegie Center, 2013. (in Russian)
31. Russian Statistical Agency, 2009. *Social and economic situation in Russia in 2009* [online]. Available from: [http://www.gks.ru/wps/wcm/connect/rosstat\\_main/rosstat/ru/statistics/publications/catalog/doc\\_1140086922125](http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1140086922125) (In Russian)
32. Sabirianova Peter, K., Svejnar, J., & Terrel, K. (2012). Foreign investment, corporate ownership, and development: are firms in emerging markets catching up to the world standard? *Review of Economics and Statistics*, 94 (4), 981-999.
33. Sostojanije bytovo korruptsii v Rossijskoj Federatsii. Report of Public Opinion Foundation to the Ministry of Economic Development . Moscow, 2011, 56 pages. (in Russian)
34. Varum, C. and Rocha, V., 2011. Do foreign and domestic firms behave any different during economic slowdowns? *International Business Review*, 20 (11), 48-59

## THE SPILLOVER EFFECTS OF DEBT AND GROWTH IN EUROPE

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### **ABSTRACT**

*What are the consequences of a shock to growth and debt on major Eurozone countries like Germany, France, Italy and Spain on other Eurozone countries? Among the major countries, which country has the most effect on others? This paper studies these questions using a Global VAR (GVAR) model consisting of the largest 11 Eurozone countries using quarterly data from 1991 to 2014. The GVAR methodology provides a very practical framework for the quantitative analysis of the relative importance of different shocks and channels of transmission mechanism. Results show that growth in larger core countries like Germany and France have positive short term effects in growth in other core and peripheral countries, though the effect is larger in peripheral countries. Among the larger peripheral countries, Italy has a negative effect on growth in peripheral countries when there is a debt shock while a debt shock to Spain affects both core and peripheral countries negatively. Other results in general show that the countries are very much integrated and most of the time affected by each other in the short run.*

**Keywords:** Debt and growth, Eurozone countries, spillover effects

### **1. INTRODUCTION**

The relationship between government debt and economic growth has been a matter of recurrent importance in the recent past. The slow growth and high debt environment created an urgent need to study the relationship between government debt and economic growth. In their paper, Reinhart and Rogoff (2010) focused on the negative correlation between debt and growth and concluded that though there is no significant relationship between these two variables in low debt levels, the growth slows down significantly after debt to GDP ratio exceeds 90%. After this, there was a stream of papers which concentrated on finding a threshold level of debt after which growth slows down (see Cecchetti et al. (2011), Kumar and Woo (2010), Caner et al. (2010), Checherita and Rother (2012), Minea and Parent (2012), Baum et al. (2013)). They found different results for different country groups and sample period. There are also critiques of these papers. Herndon et al (2013) and Herndon et al (2014) pointed out number of flaws in the Reinhart and Rogoff paper. Panizza and Presbitero (2013) did a detailed study of the methodologies used in these recent papers and concluded that these methods are controversial and the evidence of a common threshold value of debt after which growth collapses is not robust. The non-linear relationship between debt and growth was also questioned. Kourtellos, Stengos and Tan (2013b) in fact find that there is very little evidence of non-linear relationship between debt and growth once other threshold variables are controlled for. Egert (2015) showed that the nonlinear relationship is strongly dependent on modelling choices and data coverage and even if nonlinearity is found, the negative correlation only occurs at low debt levels. In some recent causality studies, hardly any evidence was found in support of the notion that debt causes growth. It was either found that growth is causing debt (see Lof and Malinen (2014), Ajovin and Navarro (2015), Kempa and Khan (2015) or there is no causal relationship between them (Panizza and Presbitero (2014)).

In spite of this disagreement on the relationship between debt and growth, there is consensus on at least one fact. It was clear from the financial crisis that countries are more interdependent than before. Especially in a currency union like the Eurozone, the potentials of spillover effects

are likely to be much higher. All the studies mentioned above either use panel data to discuss certain group of countries or consider each country separately. Unfortunately none of them study the possible spillover effects of debt on growth (i.e. what happens to debt and growth on other countries when there is a change on growth or debt in one country). This paper addresses this issue for 11 Eurozone countries with a Global-VAR (GVAR) model. As opposed to the traditional VAR model, which is suitable for studying a single country or a group of countries using panel data, a GVAR model is better able to detect the linkages between different macroeconomic variables of different countries or different group of countries. It gives a very practical global modelling framework for empirical analysis of different shocks and transmission mechanism of macroeconomic variables.

This paper includes four endogenous variables in the GVAR model with 11 Eurozone countries but concentrates on the spillover effects of shocks to growth and government debt in the four major Eurozone economies: Germany, France, Italy and Spain. This paper is organized as follows: section 2 describes the GVAR model, section 3 explains the data, some important statistical properties of the GVAR model and some initial results, section 4 discusses the results of impulse response analysis and section 5 concludes.

## 2. THE GVAR MODEL

The GVAR approach was first introduced by Perasan et al. (2004). The methodology of GVAR modelling consists of two different stages. First of all, a separate VARX model is estimated for each country separately. If some of the variables have unit root and they are cointegrated, the model is estimated in their error correcting form. In these individual VARX (or VECMX) models, each country has three different types of variables: domestic, foreign and global. Here domestic variables are the endogenous variables and the foreign and global variables are exogenous. Global variables are same for all the countries. Each domestic variables have its corresponding foreign variables. These foreign variables are constructed using a weight matrix so that the relative importance of different countries are reflected properly. They provide a connection between the evolution of domestic economy and rest of the world. These foreign variables needs to be weakly exogenous, an assumption that needs to be tested. In the second step, these individual VARX models are combined together in a consistent manner with the help of a link matrix to build a global model. Consistent with the GVAR literature, this paper the link matrix considers trade linkages in the form of a matrix of fixed trade weight.

### ■ Individual country model

Let there are  $N+1$  countries in the model, indexed by  $i = 0, 1, 2, \dots, N$ , where country 0 is considered the reference country. Each country  $i$  then follows the VARX (p,q) model:

$$y_{i,t} = a_{i,0} + a_{i,1}t + \sum_{j=1}^p \alpha_{i,j}y_{i,t-j} + \sum_{j=1}^q \beta_{i,j}y_{i,t-j}^* + a_{i,2}d_t + u_{i,t} \quad (1)$$

For  $t = 1, 2, \dots, T$ . Here,  $k_i \times 1$  matrix  $y_{i,t}$  represents the endogenous domestic variables and  $k_i^* \times 1$  matrix  $y_{i,t}^*$  is the corresponding (weakly)exogenous foreign variable.  $k$  and  $k^*$  is the number of domestic and foreign variables respectively, usually  $k=k^*$ .  $a_{i,0}$  is a  $k_i \times 1$  vector of fixed intercepts and  $a_{i,1}$  is a  $k_i \times 1$  vector of coefficients on the deterministic time trends.  $d_t$  is a set of the global variables and  $a_{i,2}$  is a vector of their respective coefficients. Finally,  $u_{i,t} \sim iid(0, \sum u_i)$ .

Foreign variables are calculated as the weighted average of the rest of the countries value of that variable. More specifically,

$$x_{i,t}^* = \sum_{j=0}^N w_{i,j} x_{j,t} \quad (2)$$

where  $w_{i,j}$  for  $i,j = 0,1,\dots,N$  are the set of weights (usually computed from the trades between the countries) that captures the importance of country  $j$  for country  $i$ .

More compactly, setting  $p_i = \max(p, q)$  and avoiding the strictly exogenous global variables for simplicity, equation 1 be written as:

$$A_{i,0} z_{i,t} = a_{i,0} + a_{i,1} t + \sum_{j=1}^{p_i} A_{i,j} z_{i,t-j} + u_{i,t} \quad (3)$$

Where vector  $z_{i,t} = (x_{i,t}', x_{i,t}^*)'$  represents both domestic and foreign variables and coefficient matrices are  $A_{i,0} = (I_{k_i} - \beta_{i,0})$  and  $A_{i,j} = (\alpha_{i,j}, \beta_{i,j})$ .

### ■ The GVAR model

The next step is to combine the individual country specific parameter estimates into a single global model. All country specific variables are considered as a single  $k \times 1$  global vector  $y_t = (y_{0t}', y_{01}', \dots, y_{Nt}')'$ , where  $k = \sum_{i=0}^N k_i$ , so that all the variables are endogenous in the system as a whole. For each country corresponding VARX model is obtained from the VECMX model that was estimated. The link matrix  $W_i$ , which is the  $(k_i + k_i^*) \times k$  matrix collecting the trade weights  $w_{ij}$ ,  $\forall i, j = 0, 1, 2, \dots, N$ , is used to obtain the identity  $z_{i,t} = W_i y_t$ .

From equation 3, it follows that:

$$A_{i,0} W_i y_t = a_{i,0} + a_{i,1} t + \sum_{j=1}^{p_i} A_{i,j} W_i y_{t-j} + u_{i,t} \quad (6)$$

Then the  $N+1$  systems in 6 is combined to get the global model in levels:

$$G_0 y_t = a_0 + a_1 t + \sum_{i=1}^p G_i y_{t-i} + u_t \quad (7)$$

Here,  $G_0 = (A_{00}W_0, A_{10}W_1, \dots, A_{N0}W_N)'$  is a known non singular  $k \times k$  matrix that depends on the trade weights and parameter estimates.  $G_i = (A_{0i}W_0, A_{1i}W_1, \dots, A_{Ni}W_N)'$ ,  $a_0 = (a_{00}, a_{10}, \dots, a_{N0})'$

,  $a_1 = (a_{01}, a_{11}, \dots, a_{N1})'$ ,  $u_t = (u_{0t}, u_{1t}, \dots, u_{Nt})'$  and  $p = \max(p_i)$  across all  $i$ .

Premultiplying 7 by  $G_0^{-1}$ , the GVAR (p) model is obtained as

$$y_t = b_0 + b_1 t + \sum_{i=1}^p F_i y_{t-i} + \varepsilon_t \quad (8)$$

Where,  $b_0 = G_0^{-1} a_0$ ,  $b_1 = G_0^{-1} a_1$ ,  $F_i = G_0^{-1} G_i$  for  $i = 1, 2, \dots, p$  and  $\varepsilon_t = G_0^{-1} u_t$

The dynamic properties of the GVAR model in 8 can be examined using Generalized Impulse Response Functions (GIRFs).

### 3. DATA AND RELEVANT TESTS

The GVAR model considers 12 major Eurozone countries: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal and Spain. According to the World Bank data of 2014, these countries account for about 97.5% of total Eurozone GDP. Four variables are used in the model. GDP growth rate and government debt as a percentage of GDP are the main two variables we are concerned with. Government budget balance and long term interest is included to capture to effect of fiscal policy and bond market. Quarterly data from 1991:Q1 to 2014:Q4 is used. Since the Eurozone countries are considered as ‘small open economies’, all individual country models include these four variables as domestic endogenous variables and weakly exogenous foreign variables (constructed using the weight matrix mentioned in the previous section). Moreover because of the importance of US economy and its possible effects on Eurozone countries, US growth rate and US long term interest rate is included in the model as exogenous global variables. Though country specific results are obtained, to distinguish between the core and peripheral economies in the Eurozone countries are later divided in to two groups. Greece, Ireland, Italy, Spain and Portugal are grouped as peripheral countries and rest are considered as core Eurozone countries. In order to do the analysis, rather than using panel data, regional variables for all the four variables are constructed in the following way for core

and peripheral country groups:

$$y_t = \sum_{i=1}^{N_t} W_i y_{i,t}$$

Where,  $y_t$  is the regional variable,  $y_{i,t}$  is the value of that variable for country  $i$  and  $W_i$  is represents the relative importance of country  $i$ . Following DdPS  $W_i$  is computed for each country by dividing the PPP-GDP figure of each country by the total sum across countries, such that the weights add up to one across the countries.

### 4. DYNAMIC ANALYSIS

This section looks at what happens to different variables of other countries or group of countries when there is a shock to one variable in one country or group of countries. Since government debt and growth are the two variables we are more concerned with, the analysis is confined to the shock and reactions of these two variables only. It use generalized impulse response functions (GIRF's) proposed in Koop et al. (1996) in conducting the impulse response analysis. Results show the bootstrap median estimates and the associated 90% bootstrap confidence bands computed on the basis of 1000 replications for the GIRF's. Responses are shown for growth and debt variables for core and peripheral country groups. These results will give evidence of debt and growth spillovers in Eurozone countries.

#### 4.1 Shock to German growth

Fig 1(a) shows the response of growth of core and peripheral countries when there is a 1 S.E positive growth shock to Germany. The GIRF's clearly show that growth in the German economy has a substantial positive effect in other Eurozone countries. In response to this shock, core countries grow little less than 2% on impact. After reaching the peak in the next quarter, the growth gradually declines and it stabilizes at around 7<sup>th</sup> quarter. For the peripheral countries, the growth is even higher on impact (about 2.5%) after the shock. After showing similar fluctuations like the core countries, the GIRF converges to zero around 7<sup>th</sup> quarter.

Fig 1(b) shows the response of government debt to a shock to a 1 S.E shock to German growth. The GIRF's show that there is a negative response to debt after the shock in both group of countries, though the response of core countries is not significant. For peripheral countries, debt falls to as far as 2% in 8 quarters after the shock, but after that period results are not significant.

In short it can be said that the peripheral countries are more affected by a spillover of German growth (both in terms of growth and debt) compared to core countries.

#### 4.2 Shock to German debt

Reaction of growth core and peripheral countries to a 1 S.E shock German debt is showed in figure 2(a). From the first two graphs in the figure, we can see that there is almost no difference in the reactions of core and peripheral country groups. On impact, an increase in debt is followed by a decrease of growth of almost 0.3%. This number is small but significant. It falls further to about 0.8% in next quarter and after that it starts to increase. Results are significant up to 4 quarters, when the GIRF's converges to zero. Fig 2(b) shows the response of debt of core and peripheral countries to a 1 standard error shock to German debt. As it can be seen from the graph, German debt shock doesn't have much impact on the debt in core countries. Though there is a positive reaction, its very much insignificant when the core countries are combined as a group. On the other hand there is a short term effect in debt in peripheral countries. Following a shock in German debt, debt in peripheral countries increases to 1.7% in its peak at about 7<sup>th</sup> quarter. The effect is significant until about 9<sup>th</sup> quarter. In short we can say that a 1 standard error positive shock to German debt reduces the growth in other Eurozone countries in the short run but at the same time increases debt (mostly in the peripheral countries).

#### 4.3 Shock to French growth

Now we consider the second largest economy in Eurozone, France. Fig 3(a) shows the response of core and peripheral countries when there is a 1 standard error shock to growth in France. The GIRF's show, like Germany, French growth also has positive effect on growth in other Eurozone countries, though the effect is much smaller in magnitude and short lived. The effect is highest on impact and goes away quickly. Core countries grow about 0.6% after the shock but the GIRF converges to zero quickly after that. On the other hand, an effect on the peripheral countries is slightly higher. They grow about 1% on impact but also move to zero quickly after that. Fig 3(b) shows the response of core and peripheral countries to a 1 standard error positive shock to French debt. Though the GIRF's show mostly small negative response of debt after a growth shock, these results are statistically insignificant for core and peripheral country groups. In short we can say French growth shock do have some positive effects on growth and negative effects on debt but these effects are much smaller in value compared to Germany and very short lived.

#### 4.4 Shock to French debt

Fig 4(a) shows the response of growth in core and peripheral countries when there is a 1 S.E positive shock to French government debt. From the GIRF's it is quite clear that the response in both group of countries are very small and they are also not statistically significant. GIRF's of individual countries also find no significant results among all the Eurozone countries. This shows that unlike Germany, debt shock in France has no spillover effects within Eurozone. Response of debt in both the country groups are shown in fig 4(b). As the GIRF's show, a positive 1 S.E shock produces similar results for both groups of countries. After a debt shock in France debt rises by 0.5% on impact in both country groups. It increases to about 0.8% in core country groups and 1% in peripheral country groups in 2<sup>nd</sup> and 4<sup>th</sup> quarter respectively.

#### 4.5 Shock to Italian growth

Now we look at what happens after a growth and debt shock in two largest peripheral countries: Italy and Spain. We start with Italy. Fig 5(a) shows that a 1 S.E positive shock to Italian growth

brings a positive short term response in growth in both group of countries. This reaction is higher on impact in peripheral countries. After the shock in Italian growth core countries grow about 0.8% on impact and peripheral countries grow about 1.4%. The effect is highest on impact for group of countries and the GIRF's quickly converges to zero after about 3 quarter.

Fig 5(b) shows the response of core and peripheral countries debt to a 1 standard error shock to growth in Italy. The GIRF's show that debt decreases on impact after the shock and then increases in later quarters. But these results are not statistically significant. These results imply that after a shock in Italian growth, there is a short term positive impact on growth in other Eurozone countries, but there very little spillover effects on debt.

#### **4.6 Shock to Italian debt**

Fig 6(a) shows what happens to growth in other countries when there is a 1 S.E positive shock to debt in Italy. Though the GIRF's show that there is a negative impact on growth at the beginning for both group of countries and later it improves, these results are again not statistically significant. Next, the reactions of debt of other countries to a 1 S.E positive shock to Italian debt are depicted in fig 6(b). A positive debt shock brings an increase in debt for both group of countries but the results are significant only for the group of peripheral countries. The shock brings about 1.3% increases in debt in peripheral countries in its peak at 5<sup>th</sup> quarter. Results are also significant until the 8<sup>th</sup> quarter.

#### **4.7 Shock to Spanish growth**

The GIRF's in fig 7(a) show the response of growth in core and peripheral countries when there is a 1 standard error positive shock in growth of Spain, the second largest peripheral country in our sample. The results show that there is a positive reaction in growth in both core and peripheral country groups after the shock, though the impact is higher in peripheral group. The core countries grow about 0.5% on impact and GIRF quickly falls down after that. For peripheral countries the growth is 1% after the shock. For both group of countries the GIRF's are significant only for the first few quarters, implying the effect is short lived. Fig 7(b) shows the reaction in debt in core and peripheral countries after the shock.

The GIRF's clearly show that there are no significant spillover effects in debt in both core and peripheral country groups. Individual country analysis also fails to find any significant results except for the case of Spain itself. A positive shock to Spanish growth has a significant negative impact on it's own debt.

#### **4.8 Shock to Spanish debt**

Fig 8(a) show what happens to the growth in core and peripheral countries when there is a 1 S.E positive shock in debt of Spain. In both group of countries an increase in Spanish debt is followed by a decrease in debt on impact. In core countries growth further falls by 0.5% in the 3<sup>rd</sup> quarter and start to increase after that. Growth is affected slightly more negatively in the peripheral country groups. In this group growth decreases by 0.7% in the 3<sup>rd</sup> quarter after which it starts to increase. GIRF's are not significant after the 4<sup>th</sup> quarter, which once again show the short term nature of the impacts. Fig 8(b) shows the response of debt of other countries to a shock in Spanish debt. As seen previously for other countries, a debt is followed by an increase in debt in both groups of countries. The effect is much larger in the peripheral country group compared to the core country group. In core country group a Spanish debt shock is followed by an increase in debt which peaks at 0.8% in about 7<sup>th</sup> quarter. This peak increase is about 2.2% in peripheral countries. This shows that a shock in Spanish debt does have a much larger spillover effects in other peripheral countries than in core countries. In short, it can be said that

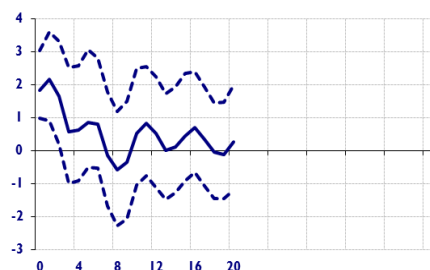
a shock in Spanish debt has spillover effects both in terms of growth and debt and the effects are in general higher in peripheral countries compared to core countries.

## Figures

### Shock to German growth

Figure 1(a): Reaction of growth

Core countries



Peripheral countries

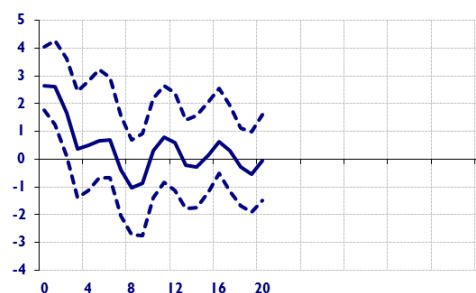
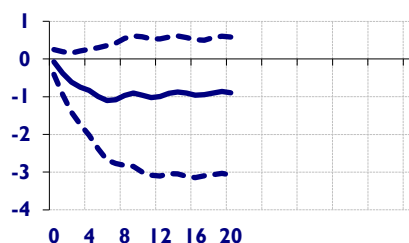
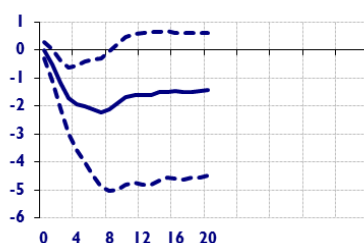


Figure 1(b): Reaction of debt

Core countries



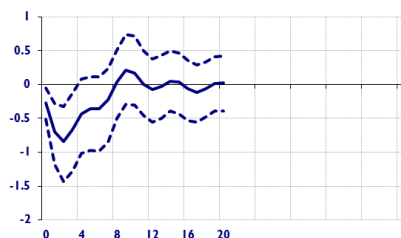
Peripheral countries



### Shock to German debt

Figure 2(a): Reaction of growth

Core countries



Peripheral countries

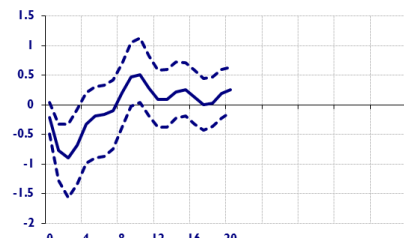
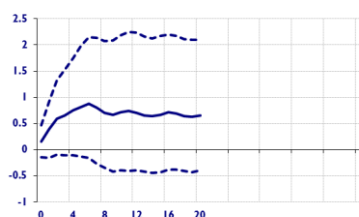
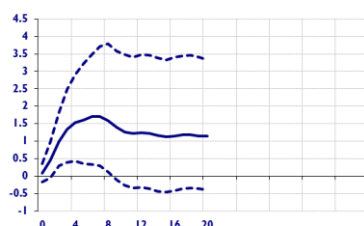


Figure 2(b): Reaction of debt

Core countries



Peripheral countries

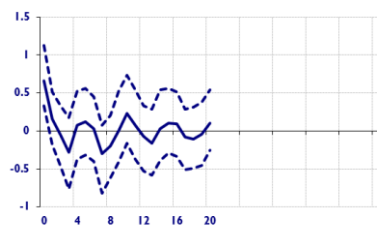




## Shock to French growth

Figure 3(a): Reaction of growth

Core countries



Peripheral countries

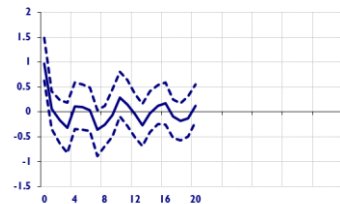
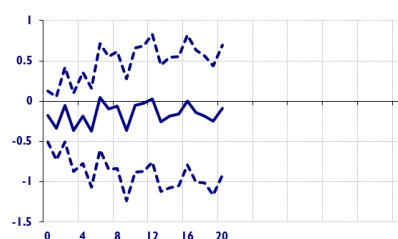
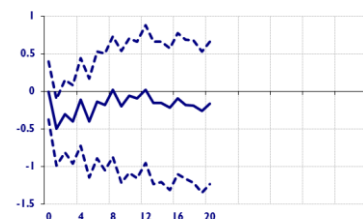


Figure 3(b): Reaction of debt

Core countries



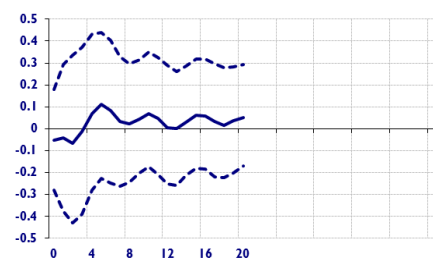
Peripheral countries



## Shock to French debt

Figure 4(a): Reaction of growth

Core countries



Peripheral countries

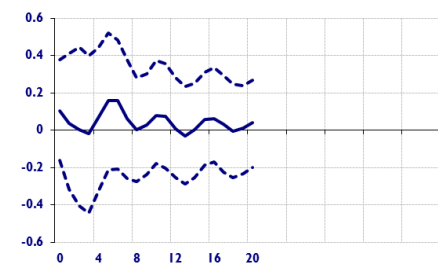
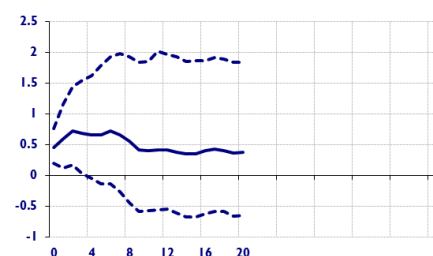
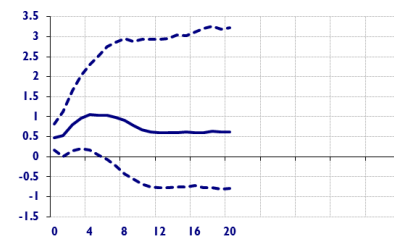


Figure 4(b): Reaction of debt

Core countries

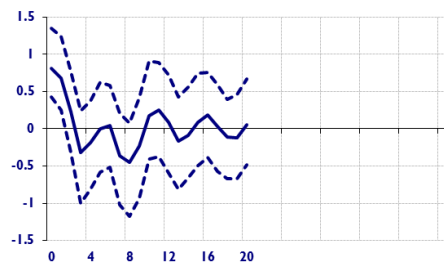


Peripheral countries



## Shock to Italian growth

Figure 5(a): Reaction of growth  
Core countries



Peripheral countries

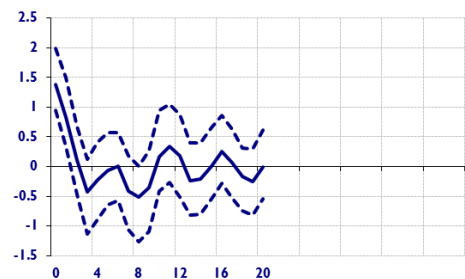
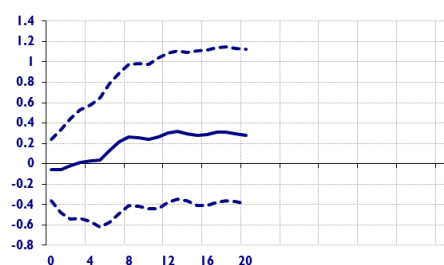
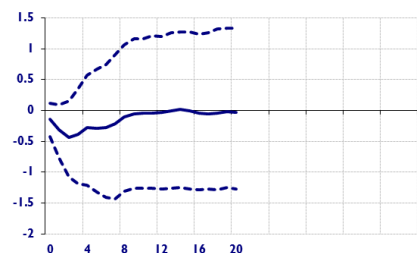


Figure 5(b): Reaction of debt  
Core countries

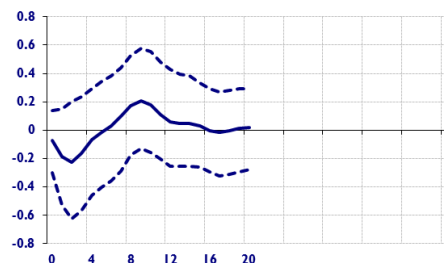


Peripheral countries



## Shock to Italian debt

Figure 6(a): Reaction of growth  
Core countries



Peripheral countries

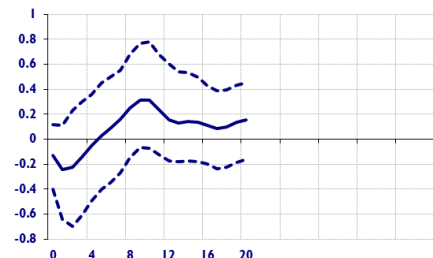
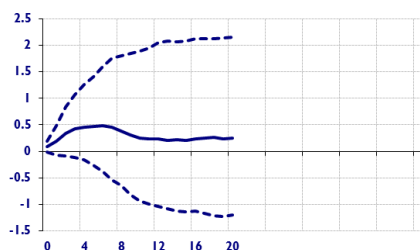
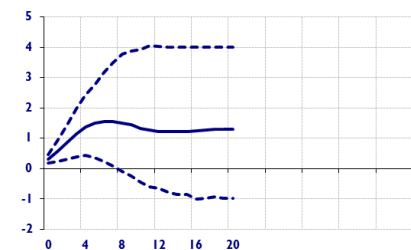


Figure 1(b): Reaction of debt  
Core countries



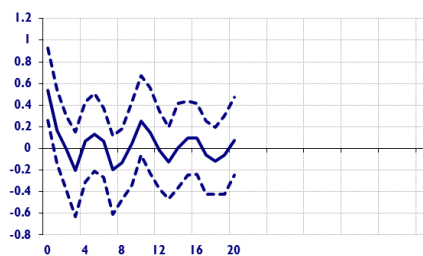
Peripheral countries



## Shock to Spanish growth

Figure 7(a): Reaction of growth

Core countries



Peripheral countries

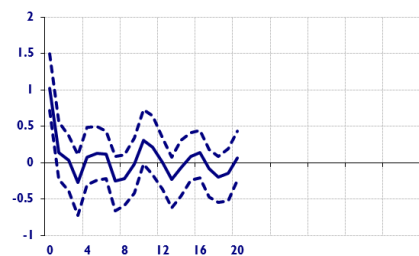
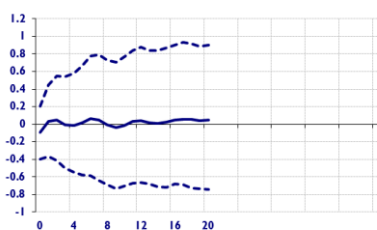
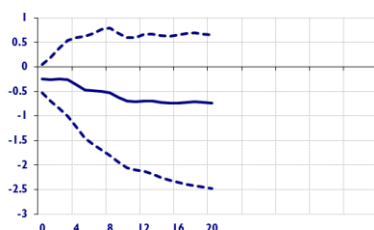


Figure 7(b): Reaction of debt

Core countries



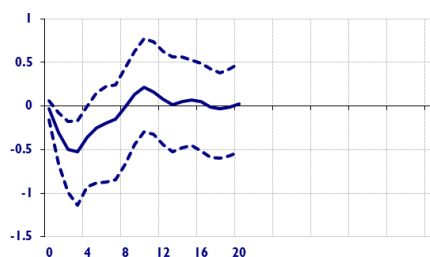
Peripheral countries



## Shock to Spanish debt

Figure 8(a): Reaction of growth

Core countries



Peripheral countries

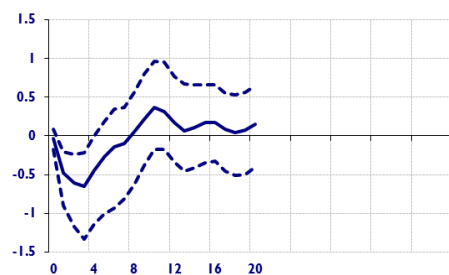
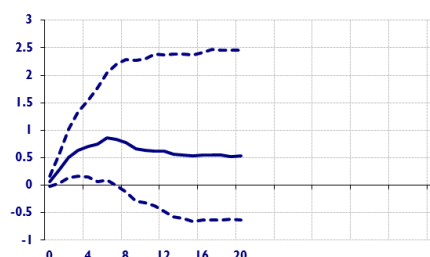
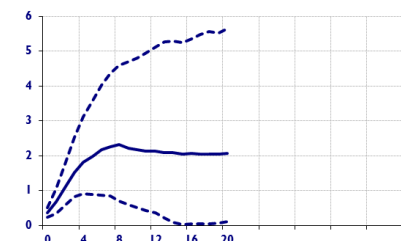


Figure 8(b): Reaction of debt

Core countries



Peripheral countries



## 5. CONCLUDING REMARKS

This paper looks at the consequences of a shock to debt and growth in major core and peripheral Eurozone countries. Most recent literatures on the interaction between debt and growth

concentrate on the intra country effects. The purpose of this paper is to find out the inter country effects within Eurozone, that is what are the effects of a debt and growth in one country to other countries. In doing so, this paper uses a global VAR (GVAR) model. The results show that a positive growth shock in the major countries has significant positive effects in growth in other countries. Spillover effects of German and French growth are higher in peripheral countries compared to core countries; also German growth has larger positive effects than the French growth. A growth shock in peripheral countries like Italy and Spain also have larger effects in other peripheral countries than core countries. On the other hand growth shocks in major Eurozone economies do not have many statistically significant effects on debt in other countries. Only exception is Germany, where it is found that a positive growth shock in Germany has significant negative impact on peripheral countries debt.

A positive shock in debt in the four countries in consideration produces some mixed results. While a shock in German and Spanish debt reduces the growth in both core and peripheral countries, a shock in French and Italian debt have no statistically significant effect on growth. A shock in German debt doesn't have much effect on the debt in core countries but have some effects on the peripheral countries. A shock in French debt on the other hand has an effect on both core and peripheral countries' debt though the peripheral countries are more affected by a German shock than a French shock. A positive shock in debt in Italy and Spain increases the debt in other peripheral countries while the shock in Spanish debt has a larger effect than a shock in Italian debt. A shock in Spanish debt also increases the debt in core countries.

## LITERATURE

1. Leybourne, S., T.-H. Kim, and P. Newbold (2005), 'Examination of Some More Powerful
2. Modifications of the Dickey-Fuller Test', *Journal of Time Series Analysis*, 26, pp. 355-369.
3. Pantula, S.G., G. Gonzalez-Farias, and W.A. Fuller (1994), 'A Comparison of Unit-Root Test
4. Criteria', *Journal of Business and Economic Statistics*, 12, pp. 449-459
5. Déés, S., S. Holly, M. H. Pesaran, and L. V. Smith (2007). Long run macroeconomic relations in the global economy. *Economics - The Open-Access, Open-Assessment E-Journal* 1 (3), 1.20.
6. Reinhart, C., Rogoff, K. (2010), Growth in a time of debt, *American Economic Review* **100**, 573-578.
7. Cecchetti, S.G., Mohanty, M.S., Zampolli, F., (2011), 'The real effects of debt', BIS Working Paper 352, Basle.
8. Caner, M., Grennes, T., Koehler-Geib, F., (2010), 'Finding the tipping point when sovereign debt turns bad', Policy Research Working Paper Series 5391. The World Bank.
9. Checherita-Westphal, C., Hallett, A.H., Rother, P., (2012), 'Fiscal Sustainability using Growth-maximising Debt Targets'. Working Paper Series 1472, European Central Bank.
10. Kumar, M.S., Woo, J., (2010), 'Public debt and growth', IMF Working Paper WP/10/174, Washington DC.
11. Minea, A., Parent, A., (2012), 'Is High Public Debt always Harmful to Economic Growth? Reinhart and Rogoff and Some Complex Nonlinearities' Working Papers 8, Association Francaise de Cliometrie.
12. Baum, A., Checherita-Westphal, C., Rother, P., 2013. Debt and growth: new evidence for the euro area. *J. Int. Money Finan.* 32, 809-821.
13. Herndon, T., Ash, M., Pollin, R., 2014. Does high public debt consistently stifle economic growth? A critique of Reinhart and Rogoff. *Camb. J. Econ.* 38 (2), 257-279

14. Panizza, U., Presbitero, (2013), 'Public debt and economic growth in advanced economies: a survey', *Swiss Journal of Economics and Statistics* 149, 175–204.
15. Kourtellos, A., Stengos, T., Tan, C.M., (2013a), 'Structural Threshold Regression', Working paper, University of Cyprus, University of North Dakota, and University of Guelph.
16. Egert, B. (2015), 'Public debt, economic growth and nonlinear effects: Myth or reality?', *Journal of Macroeconomics* 43, 226-238
17. Lof and Malinen (2014), 'Does sovereign debt weaken economic growth? A panel VAR analysis' *Economic Letters*, vol.122, pp.403-407.
18. Ajovin and Navarro (2015), 'Granger causality between debt and growth: Evidence from OECD countries', *International Review of Economics and Finance* vol 35, pp. 66-77.
19. Panizza, U., Presbitero, (2014), 'Public debt and economic growth: Is there a causal effect?', *Journal of macroeconomics*, vol.41, pp. 21-41.
20. Castrén, O., S. Déés, and F. Zaher (2010). Stress-testing euro area corporate default probabilities using a global macroeconomic model. *Journal of Financial Stability* 6 (2), 64–78.
21. Caporale and Giradi (2013). Fiscal spillovers in Euro area. *Journal of International Money and Finance*. 38. 84.e1-84.e16
22. Ricci-Risquete and Ramajo-Hernandez (2015). 'Macroeconomic effects of fiscal policy in the European Union: a GVAR model'. *Empirical Economics* vol.48 issue 4, pp 1587-1617.
23. Sun, Y., F. F. Heinz, and G. Ho (2013). Cross-country linkages in Europe: A Global VAR analysis. IMF Working Papers 13/194, International Monetary Fund.
24. Pesaran, M. H., Y. Shin, and R. J. Smith (2000). Structural analysis of vector error correction models with exogenous I(1) variables. *Journal of Econometrics* 97, 293–343.
25. Johansen S. 1992. Cointegration in partial systems and the efficiency of single-equation analysis. *Journal of Econometrics* 52: 231–254.
26. Pesaran, M. H. and Y. Shin (1996). Cointegration and speed of convergence to equilibrium. *Journal of Econometrics* 71 (1-2), 117–143.
27. Pesaran, M. H., T. Schuermann, and S. M. Weiner (2004). Modelling regional interdependencies using a global error-correcting macroeconometric model. *Journal of Business and Economics Statistics* 22,129–162.

## PUBLIC EXPENDITURE ON HEALTH THROUGH ADDITIONAL HEALTH INSURANCE

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### **ABSTRACT**

*Health care system in Croatia is financed by model which has elements of the Bismarck and Beveridge financing systems: mostly funded by the health insurance contributions at a rate of 15% and to a lesser extent from the general taxes. With public funding sources, about 20% of the health care is financed from private sources. The aim is to explore and to identify all the relevant features of the functioning of the health insurance and to indicate the measures which could be directly use in the rational spending of public funds earmarked for health care and the development of models that would be optimal for the direction of health care in the context of Croatian EU standards. The development of voluntary health insurance can effectively influence the improvement of the health care, and so lead to many benefits for the insured: greater choice with better quality, availability and transparency of services. Patients with agreed policy of additional health insurance use less the services of the compulsory health insurance ( $P < 0,001$ ,  $t = 13,508$ ,  $df = 4$ ,  $t$ -test) and direct impact on reducing public spending on health.*

**Keywords:** *Health expenditure, voluntary health insurance*

### **1.INTRODUCTION**

The health system in the Republic of Croatia is the activity of public interest necessary for the daily life of citizens, organized as the major part of a public service and as a form of public service in its nature has no commercial character (Klarić, Nikolić, 2011; Croatian Parliament 2001).

The financing and providing of health care can be summarized as the exchange or transfer of funds between key stakeholders in the health system (Mastilica, Babić, 2002). The simplest form of transaction is a direct payment in which the patient directly pays health care providers in exchange for medical services. In health care, however, developed an indirect payments through a third party, an intermediate administrative body which can be state, public or private institutions (engl. third-party payer). In the health care sector is the indirect way of paying health care through a third party created to protect citizens from the financial risks of the disease. The high costs associated with health care and the unpredictability of the disease are directly paying inadequate leading to the development of different methods of collecting money in advance for the joint submission of the risk. The financing of health care services is done so that intermediary institution collects revenue by citizens covered (either of the entire population or only in part, more often for example, only by employees) and redistributes them to health care providers (doctors, medical institutions) (Vončina, Kehler, Evetovits, Bagat, 2010).

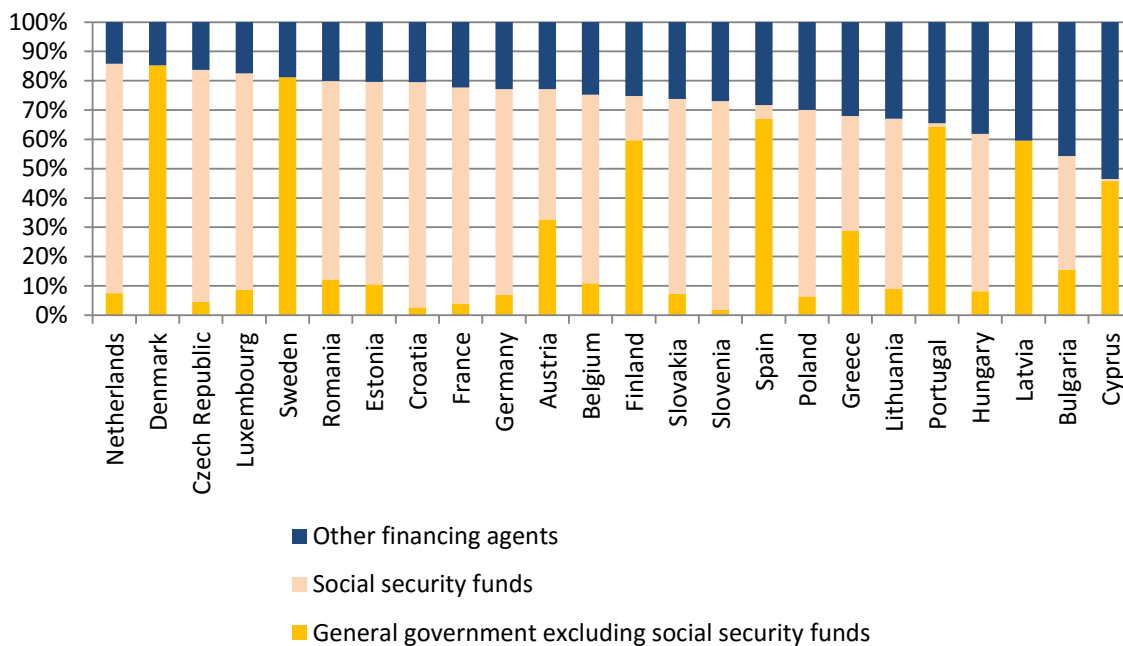
Although countries in Europe can be divided into those that use predominantly Bismarck or Beveridge financing system, a common feature is that most countries have elements of both systems. Using elements of financing through contributions and through taxes achieved certain effects which significantly improve the quality of health care.

The benefits of financing through taxes are that managing the system is relatively easy, is effective because it allows direct cost control, a general accessibility of predominantly high-quality service in relation to the relatively small finance means, provides a high degree of fairness in the financing through the principle of financing according to payment options (in terms of progressive taxation of income, those with higher incomes contribute more for health care) (Cichon, Normand, 1994).

The benefits of financing through social health insurance are that the financing system is more transparent than a tax system and therefore it is more acceptable to the public, it provides a high degree of choice, a high level of service and a high level of customer satisfaction. With regard to financing the system of social health insurance based on the payment of contributions in proportion to income, the system allows the realization of justice in the financing of the funding according to their ability. The system of social health insurance is slightly less progressive than the system of financing through taxes, but certainly more than private modes of financing. As there are no significant financial obstacles, the system of social health insurance generally provides fairness in the use of health care, although the injustice in the availability and quality may occur, primarily in relation to those who are disabled or are not entitled to health insurance (Kesner, 2003).

The health system in Croatia is financed by a model that has elements of Bismarck and Beveridge system of financing: mostly is financed by the health insurance contributions at a rate of 15% and to a lesser extent from taxation (income tax, corporate income tax, value added tax VAT).

According to data for the year 2012. total expenditure for health care in Croatia amounted to 8,5% of gross domestic product, including private health spending estimated at 1,3% of GDP (World Health Organization, 2014). Of total health care expenditures in Croatia, 76,9% relates to consumption through social health insurance (Eurostat, 2014).



Figure/Chart 1: Total health expenditure in EU countries (Eurostat, 2014)

## 2. INSURANCE

Insurance is basically the activity in which such transfer of risk from the insured to the insurer exists and the insurer agrees to indemnify those who are disadvantaged. The financial burden is shared by all members of the community at risk by the principles of reciprocity and solidarity (Bijelić, 2002). Insurance risk cover is realized on the basis of a contract to which the insurer for the premium charged undertakes occurrence of the insured event toward the insured or third party in whose favor insurance compensates damage in property insurance, or pays the agreed sum of money in personal insurance.

The insurer typically receives funds in advance as the insurance premium with the obligation to indemnify or pay compensation to the same or different party in case of the insured risks, almost all countries have adopted specific laws to regulate in detail the activity of insurance premium with aim to reduce the possibility of adverse consequences for the insured, or to reduce the possibility of default of the insurer toward the insurance beneficiary.

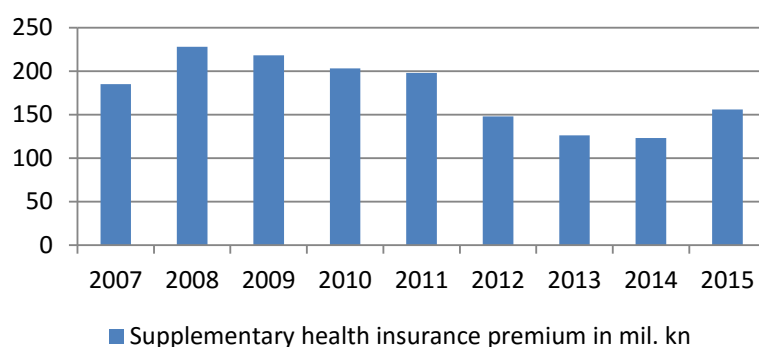
Premium or commercial insurance is the most developed form of insurance protection. A large number of insurance forms is developed in order to meet different requirements and needs of individual and business subjects. Most people associate the term „insurance“ with premium insurance. Unlike other types of insurance (social, mutual, state insurance) the only motive to provide premium insurance services is to make profits. Basic division of the premium insurance in most developed countries is the life insurance and general insurance (property insurance and accident insurance), in some countries health insurance asides in a special group (Hržić, 2007). Mutual insurance (engl. Mutual Insurance) is the insurance form where members of a mutual insurance company by paying the investment and contribution mutual guarantee on the principles of reciprocity and solidarity to indemnify the occurrence of the contracted risk. Mutual insurance companies do not operate for profit, the funds are collected through contributions only to the extent necessary to fulfill the obligations to policyholders and to create a reserve safety (Hržić, 2007). State insurance occurs when (premium) insurance companies do not include an interest, either because of lack of experience or because of the catastrophic risk (danger) associated with this insurance where the insurance company does not have enough capacity. Health insurance in Croatia is regulated by the two groups, compulsory and voluntary health insurance. Compulsory health insurance is regulated by the Croatian Institute for Health Insurance (HZZO), voluntary health insurance (premium insurance) is carried out by the HZZO and also by the insurance companies (Turek, 1999; Croatian Parliament 2008.). The Law on Voluntary Health Insurance provides for three types of voluntary health insurance: supplementary, additional and private health insurance (Croatian Parliament, 2006). Supplementary health insurance covers the difference in the cost of services from compulsory health insurance and the full cost of services (participation). Additional health insurance provides more rights and a higher standard of service to the rights of compulsory health insurance. Private health insurance in Croatia is not in the application, even though the Law on Voluntary Health Insurance provides it as a kind of insurance. From a total of 27 insurance companies that were active in year 2013., 7 insurance companies offered voluntary health insurance (Croatian Insurance Bureau, 2015).

## 3. ADDITIONAL HEALTH INSURANCE AND THE PUBLIC HEALTH SPENDING

Some countries wrongly view the additional health insurance only as a supplementary product to certain services of the compulsory health insurance, essentially their specific services can replace the compulsory health insurance and clear the way for additional sources of health financing. Also, the capacities of mandatory health insurance are released. An important feature of an additional health insurance is to strengthen the individual conscience and individual responsibility for own health as the goal of every model. In this way, people became aware of the costs of health care which can reduce the total expenditure for health insurance (Hržić,



2007). The role of additional health insurance as a model that allows policyholders faster and better service depends on the market development in some countries, market share and scope of the risks covered. When the government health insurance is not mandatory or universal, additional health insurance improves and enhances access to the health service that is still limited to those with a lower income because of low purchasing power. In some models, additional health insurance provides to the clients speed, availability and alternative service of the state insurance. Policyholders enjoy certain benefits, for example, less time for certain health services. Today in Croatia, additional health insurance benefits free capacities of the state institutions (hospitals, clinics, etc.), which does not prejudice the rights of patients from compulsory health insurance (Erdelji, 2008). Additional health insurance offers to the policyholders an additional level of choices in the health service. The choice of these services primarily depends on the free capacities of public health institutions due to insufficiently developed network of private health care providers. The feature of additional health insurance is a wide variety of products that allows policyholders to decide on the level of protection that they want to have. To make a proper choice on the product market the insured individuals should have clear, transparent and comparable view on the market and services in general. To avoid the inability of certain groups to enter the insurance some countries are restricting insurers flexibility and innovation in products, for example, the minimum „basket“ of rights that provides additional health insurance is regulated and must be provided to all policyholders, regardless to their risk level. The Law on Voluntary Health Insurance has also followed this policy and the insurer of the additional health insurance is obliged to insure for all the insured individuals rights and obligations of the additional health insurance through their particular program (Croatian Parliament, 2006). Insurers often emphasize the importance of the additional health insurance in reducing the costs financed from the state budget as the main argument in negotiations with the state. The experience of OECD countries shows that health insurance continues to grow despite the market of the additional health insurance, financed major from the state budget, what does not exclude the impact of the additional health insurance on reducing public spending on health (OECD, 2015). Data for Croatia indicate that after a number of years of recession in which the decrease in written premium in additional health insurance was recorded, in the year 2015. it is expected that the trend will be reversed and the premiums of the additional health insurance will be increased.



*Figure/Chart 2: Supplementary health insurance premium in Croatia (Croatian Insurance Bureau, 2015)*

According to Croatia Health Insurance data, patients who have contracted additional health insurance are using less service in the public health system. In the three-year period from 2010. to 2012. spending on services in the compulsory health insurance by the patients with additional health insurance and without additional health insurance was analyzed. As a measure of service amount use in the compulsory health insurance, the paid participation amount was used. This amount was fixed at the level of 20% of the price in the compulsory health insurance (Croatian

Parlament 2008). Research was conducted on a total of 94.451 patients, 64.208 patients had an additional health insurance policy and 30.247 patients had not the policy of the additional health insurance.

The results showed that patients with additional health care use statistically significant less services in a compulsory health insurance than the patients who do not have additional health care policy ( $P < 0,001$ ,  $t = 13.508$ ,  $df = 4$ , t-test). The average annual amount of participation in the system of compulsory insurance of patients who do not have additional health insurance policy in the period under review amounted to  $308,3 \pm 20,4$  kn and the average annual amount of participation of patients who had additional insurance policy amounted  $124,9 \pm 11,7$  kn.

*Table 1: Expenditure for co-payment in mandatory health insurance for patients with and without complementary health insurance in period between 2010 and 2012*

	Number of patients	Expenditure for co-payment in mandatory health insurance	SD	t	df	P
Patients without supplementary health insurance	30.247	308,3	20,4	13,508	4	$P < 0,001$
Patients with supplementary health insurance	64.204	124,9	11,7			

#### 4. CONCLUSION

Whatever role of supplementary health insurance has in the health insurance in general, it is a part of the total expenditure for health and adds to the overall costs of health care services. Most OECD countries stand for less state control over additional health insurance and a smaller impact on price formation in the system. Insurers call for greater bargaining power when pricing and quantify the service in this sector, not wanting to compare with state system, where everything is subject to secure money in the budget or fund. Countries that have multiple sources of financing health care and a higher proportion of the additional insurance in total costs, such as the USA, Switzerland, France and Germany have the highest total expenditure for health care per capita and higher average life span. This is certainly linked to the quality of health care and the availability of treatment. (Eurostat, 2014).

There are several reasons why an additional health insurance policy fails to largely reduce the costs of public funding. One fact is that the providers of additional health insurance choose only certain services that are covered by the insurance. More expensive and demanding services still remain in the state system, partly because of insufficient public health care capacity. This can generally be explained by the fact that state spending is concentrated on a group that is statistically largest consumer, this are elderly people, chronically ill or permanent disabled.

Additional health insurance system that is based on the competitive market can increase the responsibility of market participants and provide greater choice for users, this is generally achieved through higher prices. Where the additional health insurance the primary source of financing health care is, it is a challenge to provide security to the socially vulnerable groups. Market regulation and promoting equality requires costs that are weakening flexibility and the innovation of the insurer.

Additional aggravating circumstance for any significant reduction in public spending on health through potential of additional health insurance is great, the rights of the insured under the mandatory health insurance are not clearly defined and thus money is spent irrational and the uneconomical health care is realized. Clarifying the services under the mandatory health insurance opens the possibility of a stronger market performance of additional health insurance (Bagat, 2015).

The development of supplementary health insurance can be an effective influence on the improvement of health care, so come up with a number of benefits for its clients: greater choice of insurers service, higher quality, availability and transparency of services, creating of market-oriented insurers would lead to new sources of health financing, thus could further reduce public spending on health.

## LITERATURE

1. Bagat, M. (2015). Services in compulsory health insurance, Medical Newspaper, 9(42),21-22.
2. Bijelić, M. (2002). Insurance and Reinsurance. Zagreb: Tectus.
3. Cichon, M. and Normand, C. (1994). Between Beveridge and Bismarck- options for health care financing in central and eastern Europe. World Health Forum. 15(4):323-8.
4. Croatian Insurance Bureau. (2015). Annual Report for 2013. Retrieved 25.11.2015. from <http://www.huo.hr>
5. Croatian Parliament. (2001). Constitution of the Republic of Croatia. *Official Gazette* 41:705.
6. Croatian Parliament (2006). The Law on Voluntary Health Insurance. *Official Gazette*. 85:2016.
7. Croatian Parliament. (2008). The Law on Compulsory Health insurance. *Official Gazette*. 150:4098.
8. Croatian Parliament. (2008). The Law on Health Care. *Official Gazette*. 150:4097.
9. Erdelji Stivic, B. (2008). Croatia Health Insurance. *Sigurnost*. 50(1):77-78.
10. Eurostat. (2014). Healthcare Statistics. Retrieved 25.11.2015. from [http://ec.europa.eu/eurostat/statistics-explained/index.php/Healthcare\\_statistics](http://ec.europa.eu/eurostat/statistics-explained/index.php/Healthcare_statistics)
11. Hrzic, M. (2007). The Optimization Model of Healthcare Financing in the Republic of Croatia (Master's thesis) Zagreb: [M, Hrzic].
12. Kesner Skreb, M. (2003). Social Security Contributions. *Financial Theory and Practice* 27 (2):271-273.
13. Klarić, M. and Nikolić, M. (2011). The Organization of Public Services in the European Legal Order. *Proceedings of the Faculty of Law in Split* 48:89-102.
14. Marković, B. and Vukić, S. (2009). Models of the Organization and Financing of Health Care in Selected Countries. *Economic News* . 1:183-196.
15. Mastilica, M and Babic Bosanac S (2002). Citizens' views on health insurance in Croatia. *Croat Med J*. 43(4):417-24.
16. OECD. (2015). OECD Health Statistics 2015. Retrieved 25.11.2015. from <http://www.oecd.org/els/health-systems/health-data.htm>

17. Turek, S. (1999). Reform of health insurance in Croatia. *Croat Med J.* 40(2):143-51.
18. Voncina, L. Kehler, J. Evetovits, T. Bagat, M. (2010). Health insurance in Croatia: dynamics and politics of balancing revenues and expenditures. *Eur J Health Econ.* 11(2):227-33.
19. World Bank: Health Expenditure (2015). Retrieved 25.11.2015 from <http://data.worldbank.org>
20. World Health Organization. (2014). Global Health Observatory Data Repository. Retrieved 10.09.2015. from <http://www.who.int/countries/hrv/en/>

## IMPLEMENTATION OF ISO 9000 STANDARD SUPPORTED BY PERFORMANCE MEASUREMENT

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### ABSTRACT

*The implementation of a quality management system is a long process that requires the involvement of all employees in all business segments. The ISO 9000 family addresses various aspects of quality management. In order to ensure that ISO 9000 standard is used according to defined rules and requirements, it is necessary that the process of its implementation is properly supported through contemporary management tools. Balanced Scorecard (BSC) is a method for performance measurement and management, that can be applied with two different purposes: either as a system for continuous monitoring and management of business systems, or as a means for supporting, evaluating and monitoring the implementation of a one-time endeavor. In this paper, the BSC method will be used to support the realization of "the implementation of quality management system according to ISO 9000" defined as a strategic objective.*

**Keywords:** *Quality management systems, ISO 9000, Balanced scorecard*

### 1. INTRODUCTION

Quality assurance is an essential component of every modern and successful business system today. The question is not whether we need to ensure the quality of services or products, the question is how we are going to do it.

Every business system, in order to survive in a very dynamic market has to analyze its business processes, identify problems and invest in their removal. It is necessary to improve the business system so that it becomes or remains competitive and enhance the effects of its actions. But it is not enough simply to buy a new machine, hire a new person, or replace the manager. Changes in business are usually large, both in scope and in financials.

High costs of investment in new products, ideas, the new technology, skilled and hardworking people, the expansion of the business, or any other form of business development must bring and increase business results and profits. And to make sure that our new and developed products or services will meet market demands, they have to be in good quality and they have to meet the needs of our customers in the best possible way. The quality of the product is not about that the customer gets what he paid for, but to gain more for his money.

## 2. BUSINESS SYSTEMS AND QUALITY PERCEPTION

Business system can be viewed as a unit consisting of its employees, capital equipment, technology and work environment. Employees of the company are all persons which ensure the implementation of the primary objectives in the business. Equipment includes machinery, computers, office supplies, in short all objects that facilitate the daily work in the system. Technology of work is the way in which operations are performed in a business system. Company forwards the inputs, received from its suppliers, in transformation processes, and sends the output values which are obtained to its customers. Environment of the company such as competition, changes in economic conditions of the state, changes in market requirements effects the transformation process.

The process can also result in output as we or our customers did not want, and such product or service will certainly not be able to be sold. The product or service may be of satisfactory quality, however, competition may offer "a little better", or the customer wants "something else".

What quality actually is can be viewed from two perspectives: the customer and the manufacturer (and/or the service provider).

From the customer's perspective of quality is often the primary factor for choosing one or another product or service. In doing so, the customer can be an internal user within an organization of the manufacturer, in any other organization or the end user. Russel & Taylor define dimensions of quality for products and for services (Russel, Taylor, 2003, p. 53).

Dimensions of quality that user expect for products are:

- Performance - the basic operating characteristics of the product
- Additional features - "extra" parts added to the essentials
- Reliability - the probability that the product will be valid within the expected time period
- Standardization - the degree to which the product complies with the standards set
- Durability - how long the product lasts
- Maintainability - ease of maintenance, speed of repairs, courtesy and competence of persons who maintain the product
- Aesthetics - how the product looks, how it feels, smells, sounds etc.
- Security - ensuring that the product will not harm the user, that user will not be hurt by using the product.

Dimensions of quality that users expect in service are:

- Time and time limits - for how long the user has to wait for the service and whether the service is provided on time
- Completeness - is assured whenever the user is asking for the service within the framework of the service
- Kindness - how users are treated by employees
- Consistency - whether the same level of services is provided for each user and each time the user appears
- Accessibility and convenience - how difficult / easy it is to get the service
- Accuracy - whether the service is performed accurately every time
- The reaction rate - how fast and how well the organization responds to non-standard situations.

Market research is one way to discover what the wishes and expectations of customers are and it is important that they are well-known throughout the organization. In this way, marketing and

product design section can determine the design of the product or the service in a way that ensures that such a product is manufactured or service is provided. From the perspective of the manufacturer product or service development includes a set of characteristics of quality that users want, need and can afford. The design of the product or service must take into account all of the required quality characteristics and incorporate them into the design specifications. When the product or service design is determined, the manufacturer is defining quality through the ability of the production process to comply with the design specifications. The quality of compliance is then the degree to which the product or the service meets the design specifications (Russel, Taylor, 2003. p. 56).

### 3. ISO AND BSC

The quality can be defined in various ways. Oxford American vocabulary defines quality as "level or degree of excellence", while the ANSI (American National Standards Institute) argues that the quality is "the totality of features and characteristics of a product or service that has the ability to meet existing needs."

The International Organization for Standardization (ISO) is an independent, non-governmental international organization, created with the objective to define a global consensus of international standards.

The standard is a documented agreement that includes technical specifications or other precise criteria which have to be used as rules, guidelines or definitions in order to ensure that the materials, manufacturing processes and services are fit for their intended use. The ISO 9000 standard for quality assurance was issued for the first time in 1978 and renewed at least every 5 years. Standards in the ISO 9000 family include:

- ISO 9001:2015 - sets out the requirements of a quality management system
- ISO 9000:2015 - covers the basic concepts and language
- ISO 9004:2009 - focuses on how to make a quality management system more efficient and effective
- ISO 19011:2011 - sets out guidance on internal and external audits of quality management systems. (Management system standards, 2015)

ISO 9001:2015 defines seven "Quality management principles", that are a set of fundamental beliefs, norms, rules and values that are accepted as true and can be used as a basis for quality management." (Quality management principles, 2015)

The seven quality management principles are:

- Customer focus
- Leadership
- Engagement of people
- Process approach
- Improvement
- Evidence-based decision making
- Relationship management

When an organization decides to introduce a quality management system, it has to be aware that it is time-consuming and demanding project that seeks engagement across the organization, each department, service and individual employees. Implementing the ISO 9000 certification is a necessary, but not sufficient condition to construct an effective quality management system. Without careful design and implementation of ISO 9000, it is difficult to expect a performance excellence (Kim, Kumar, Kumar, 2011, p. 384). Along this line, studies postulate that

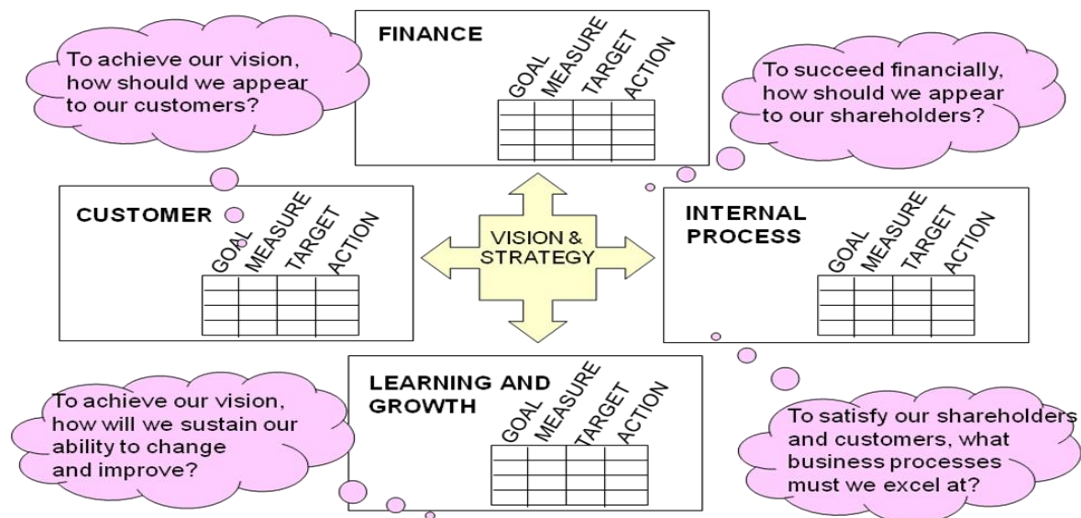
organizational efforts and implementation structure play key roles in creating long-term, effective performance of ISO 9000 (Kim, Kumar, Kumar, 2011, p. 384).

Strategic planning is a “disciplined effort to make basic decisions and implement activities inside the organization, which answer these questions: What is the organization? What does it do? Why does it do it?” (Bryson, Alston, 2010, p. 5) There are three basic questions that the organization has to answer through the process of strategic planning:

- (1) Who are we, what are we doing now and why?
- (2) What do we want to be and do in the future and why?
- (3) How do we get from the present to the desired state?

The answer to the first question gives the description of the "AS IS" condition; the answer to the second question describes the future, the "TO BE" state. The answer to the third question defines the strategic plan, which describes how the AS IS and the TO BE state comes into balance through a strategy, which represent a pattern of behavior in the achievement of the strategic plan (Tomičić, Dobrović, 2006, 15).

The term "performance measurement" means determining the effects that can be achieved by performing any, purpose-oriented, work. "If the organization in the information age want to survive and prosper, they must use measurement and control system derived from their strategy and capabilities." (Kaplan, Norton, 2001, p. 358) Balanced Scorecard enables the measurement and monitoring of qualitative and quantitative performance indicators of the organization usually through four perspectives: financial, customers, internal processes and learning and growth. The four perspectives of the BSC are connected to a central element of the vision / strategy (Figure 1).



Kaplan, Norton: *Using the Balanced Scorecard as a Strategic Management System*

Figure 1: The Balanced Scorecard (Kaplan, Norton, 1996, p. 9)

If “the implementation of quality management system according to ISO 9000” is defined as a strategic objective of an organization for the future then the method of Balanced Scorecard (BSC) is one of the possible methods that can be used to support the realization of that strategic objective.

The organization may introduce other perspectives in the BSC model, if necessary. When we are talking about an organization that wants to introduce a quality management system that



should be the perspective of vision, because the strategic goal originates from it. The new perspectives, called VISION, answers the question: In order to fulfill its vision of how we operate?

#### 4. STRATEGIC MAP OF OBJECTIVES FROM THE BASIC PRINCIPLES OF ISO 9000

The strategic map of objectives (SMC) is a basic graphical representation within the BSC method, which describes the connection between the activities that have to be undertaken to achieve the strategic and derived corresponding objectives.

According to the BSC method it is necessary to define the objectives derived from the strategic goal, and put them in perspectives. If we define the basic principles of the ISO 9000 standard as objectives derived from the strategic goal of introducing quality management systems, we can put the principles in the BSC perspectives and determine their mutual influence. Table 1 shows a set of possible measures for all principles.

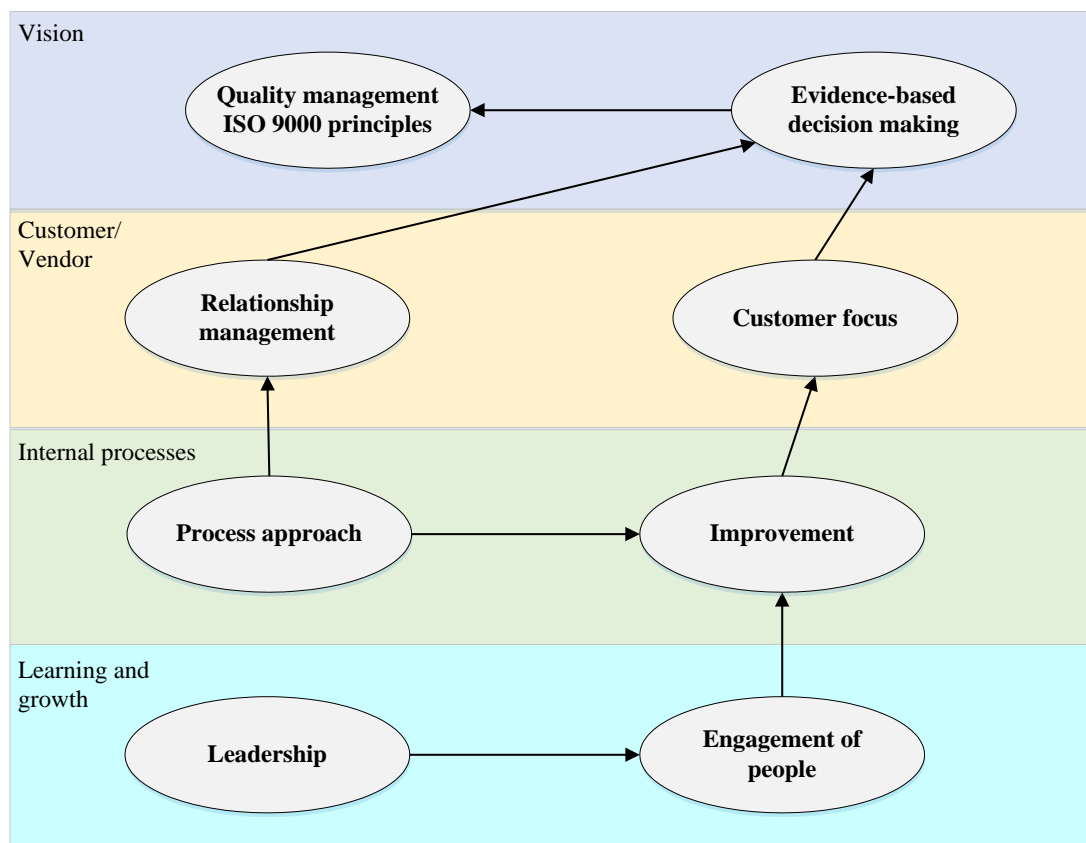


Figure 2: The strategic map of objectives for strategic objective of "implementing a quality management system according to ISO 9000 standard"

*Table 1: Objectives and measures*

<b>Principle:</b>	<b>Measures:</b>
Leadership	Number of meetings organized by the Board and management with staff
	Number of approved education for employees
	Evaluation of the ability to run the business under new requirements and changes
Engagement of people	Turnover rate of employees
	Employees average length of employment
	Contribution of positive attitude towards the leadership of the organization in the overall opinion of the employee
Process approach	Contribution of clearly defined requirements for the implementation of activities in the overall requirements
	Number of employee inquiries for additional work clarification
	Number of new employees who remain in the organization after their trial period
Improvement	Launch period for new product or service on the market
	Response time to reclamation
	Adjustment number for test product or service
Relationship management	Number of suppliers complaints in given period
	Number of changed suppliers because of bad relationship or unfulfilled conditions of partnerships
	Quality rating of delivered product
Customer focus	Number of lost unsatisfied customers to the competition
	Number of bids accepted in relation to the number offer made
	Number of loyal customers
Evidence-based decision making	Ability to make the right decisions based on the information available from the environment
	Information availability at the right time

Which measures the organization will depends on the business system in which the quality management system is introduced. The aim of the table is not to define all possible indicators, but to set some examples for each objective or principle.

## 5. CONCLUSION

The quality of products and/or services that an organization provides to the market is unquestionably the main feature that will lead to their sale. Price component is important, however, even for the smallest and cheapest product customer or user requires a certain level of quality. Quality can be viewed from the perspective of the customer or the manufacturer. The characteristics are different from the perspective of the customer and the manufacturer, but the goal is always the same - a quality product or service that will be sold and accepted in the market.

Business systems that want to continuously monitor and improve the quality of their products, and thus to be competitive in the market, implement quality management systems. The quality management system according to ISO 9000 standard defines seven principles that must be respected in making and designing a quality management system. These seven principles have been placed in perspectives of Balanced Scorecard, causal links were defined, and possible measures for principles were set. The intention of the paper is not to show a detailed model, but to set strategic guidelines, which can be used to support intentions in the business system to implement a quality management system as one of the strategic objectives of the organization.

## LITERATURE

1. Bryson, J.M., Alston, F.K.(2010). Creating and Implementing Your Strategic Plan. USA: John Wiley & Sons.
2. Kaplan, R.S., Norton, D.P. (2001) The Balanced Scorecard: The Strategy-focused organization, USA: Harvard business school press.
3. Kaplan, R.S., Norton, D.P. (1996) The Balanced Scorecard: Translating strategy into action. USA: Harvard business school press.
4. Kim, D. Y., Kumar, V., Kumar, U. (2011). A performance realization framework for implementing ISO 9000, International Journal of Quality & Reliability Management: Vol. 28 No. 4 (p. 383-404).
5. Management system standards (2015) Retrieved 10.11.2015 from [www.iso.org](http://www.iso.org)
6. Quality management principles (2015) Retrieved 10.11.2015 from [www.iso.org](http://www.iso.org)
7. Russel, R., S., Taylor III, B., W. (2003). Operations management, USA: Prentice Hall.
8. Tomičić, M., Dobrović, Ž. (2006). Metode oblikovanja strateške mape ciljeva kod izgradnje BSC. Zbornik radova konferencije CASE 18 (p. 13-18).

## THE LEGAL AND INSTITUTIONAL INFRASTRUCTURE OF PRIVATIZATION IN KOSOVO

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### **ABSTRACT**

*Resolution 1244 of the UNSC assigned UNMIK as the authority to maintain the order and the law and to be the guarantor for the economic reconstruction. Also, UNMIK administers the immovable and immovable property of Kosovo. However, it faced the dilemma about what was the applicable law in Kosovo, who is the competent authority to adopt the new laws, what is the status of the social property, etc. Thus, an immediate engagement for the completion of legal and institutional infrastructure for the commencement of privatization process was required.*

*For the issue of transition and privatization, the Pillar Four of UNMIK was the competent authority. For this purpose, the Kosovo Trust Agency (KTA) was established. The Agency was chaired by the Head of the fourth Pillar of UNMIK. The KTA Board has adopted the statute and the Rules of Procedure/Operational Policies.*

*For the privatization purpose, through the Special Regulation was established the Special Chamber with exclusive competences to solve the legal disputes related with privatization.*

*The privatization process during the whole period observed faced difficulties of different natures due to the specifics of Kosovo as a new country, recently liberated.*

*To implement this important and complex process, the Special Representative of the Secretary General /SRSG/ adopts regulations to establish the legal basis for the establishment of the competent institutions for the implementation of the privatization process in Kosovo.*

*The initial problems were related with the definition of the concept of Social Property, definition of the applicable law, the position against the claims from Serbia towards the social property in Kosovo, definition of the privatization model and the operational policies.*

**Keywords:** *Transition, Privatization, Agency, Special Chamber, UNMIK, Regulation*

### **1. INTRODUCTION**

The Constitutional Framework for Provisional Self-Government (Regulation 2001/9) reserved the right and the responsibility for UNMIK to administer the social, public and state property as well as the regulation of the Publicly and Socially Owned Enterprises.

Through the Resolution 1244 of the UNSC, among other things, the mandate of the UNMIK was stipulated to maintain the rule of law and order and to support the economic reconstruction in the meaning of the guarantor and not as an owner of the public and social property.

To implement this important and complex process, the Special Representative of the Secretary General /SRSG/ adopts regulations to establish the legal basis for the establishment of the competent institutions for the implementation of the privatization process in Kosovo.

The initial problems were related with the definition of the concept of Social Property, definition of the applicable law, the position against the claims from Serbia towards the social property in Kosovo, definition of the privatization model and the operational policies.

In the first three years, the UNMIK structures were engaged in preparing the legal basis and in building the privatization institutions. The Privatization Agency and the Special Chamber within the Supreme Court were established.

All these institutions in terms of the composition were mixed between the locals and international, even though they were dominated by the internationals. The financial means collected through the sale of the assets have been saved in the Trust Fund until the expiration of the deadline of the requests from the creditor or claiming owners.

Under these restrictions, UNMIK could not play the role in maintaining the law and in encouraging the economic development, to undertake measures for the protection of the assets from the robbery and degradation as well as to ensure the attraction of the foreign capital.

KTA was established as a legal entity which means that it had the full legal rights to draft contracts, protect the assets, to stand as plaintiff and as defendant. According to the Regulation, the initial capital of KTA was 10 million which were provided by the Kosovo budget. The responsibility of KTA can not exceed this amount and it can not be hold responsible for the debts of the enterprises that are under its administration.

After the establishment of the KTA, the TID and some other UNMIK departments ceased to exist and their functions were transferred to KTA. The administration of the Publicly and Socially Owned Enterprises was put under KTA from the abolished departments, but their function of definition and implementation of policies and sector regulations were not transferred under KTA.

Pursuant to Article 11.2 of the Constitutional Framework, the independent bodies possess the authority, obligations and the respective composition as determined by the legal instruments. These bodies are admitted by the Provisional Self-Government Institutions. So, the KTA is a domestic institution, but UNMIK's only. Who is going to be responsible under international rules, in case any violations is committed by KTA, in case KTA does not fulfill the expropriation criteria that are provided by international public rules, who is going to be responsible for the compensation?! In this case UNMIK, means the UN. But, which law defines clearly the responsibilities of the international organizations and how will the dilemma of responsibilities be solved when it is known that KTA is established as an independent institution pursuant to the Constitutional Framework.

## **2. MANAGEMENT AND ORGANIZATIONAL STRUCTURE**

In terms of the management structure, the KTA is represented by the Board of Directors, which is composed from four international and four domestic directors which means that there were joint international and domestic decisions.

The Board of Directors is responsible for the operation of KTA. Among the international directors are included the Head of the UNMIK's Pillar IV for Reconstruction and Development which thanks to this function it is deputy of the SRSG, and at the same time is President of the Board, his deputy, deputy of SRSG for Civil Administration and Executive Director of KTA. Among the local directors that are appointed by the SRSG are three Ministers of the Kosovo Government, one of them from the Serbian community and the fourth director is the representative of the Independent Trade Unions of Kosovo (ITUK). The model is a co-decision making one, but in order to ensure the control in case of different voting, the Chairman of KTA has a double right to vote (second vote), even though it never occurred as a case in practice because the local representative from the Serbian community always was on the side of the international members of the Boards. The mandate of the domestic members and of the managing director was for a two years term with the possibility for renewal from SRSG.

The Board of Directors of KTA had adopted the Statute and the Rules of Procedure (Operational Policies) as well as the internal organizational structure of the KTA.

In the decision making process the rules for the presence of majority members applied. The quorum was considered to be valid if five directors were present. In cases, when the Regulation requires the absolute majority, then the decision is taken with 5 votes in favor of this decision. The daily tasks are managed by the Managing director such as: organization of the Board meetings, admission and dismissal of the staff, implementation of the Board's decisions and he is responsible only to the Board. The Board is responsible to the SRSG, respectively KTA that according to this rule, it is an UNMIK body. The KTA Board reports to SRSG every quarter. He does have the right to change the directors if there is any reason to, but also to dismiss the

decisions of the Board in case they are contrary to the UN Resolution, applicable laws as well as to appoint the external auditors to audit KTA. If need be for the KTA, they may call the police for help, they may sentence fines, or individuals that impede or misuse the available financial means and this will be subject to administrative procedures in case of complains as well as of the court procedures. In cases of the lawsuits submitted against KTA, these lawsuits may be submitted only to the Special Chamber of the Kosovo Supreme Court, specialized for the administrative legal disputes. The Special Chamber established at the same time with KTA Regulation 2002/13 to defend minorities, shall have in its composition three international judges, one of them being the Chairman. According to Regulation 2002/13, the Special Chamber has exclusive competence over a certain category of lawsuits and in case it deems appropriate, it may send the case in a domestic court. In cases of the complains submitted against the decisions of the domestic courts, they will be submitted to the Special Chamber which has a double function (first and last legal instance). The Chamber has in total 5 members and the decisions are issued with three votes in favor for the respective decision. The KTA founders do not take sufficiently under the consideration the purchasing possibility of the assets by the Serbian Government.

### **3. LEGAL FRAMEWORK**

There is no regulation, or any other legal provision in the Regulation that precludes them from this possibility. On the other hand, the Government of Kosovo, any of its institutions or the Provisional and Local Power Institutions are excluded from the right to buy shares to the new corporation companies.

Another paradox with regards to these processes is related with the financial means accumulated from the sale of the assets of the SOEs. These financial means can not be used for the economic development of the country or for any other need, but they have to be kept in the Trust Fund to pay the eventual claims of any claimant towards the property or debts of SOEs. If we take into consideration the transactions and the transformations concluded by the Serbian power during 1989 - 1999, then it results that the only "creditors" could be the companies, individuals and the Serbian state itself that have benefited during this period from the discriminatory laws and can benefit now from the compensation by KTA from the financial means saved in the Trust Fund.

KTA's decision to govern under its authority the properties as stipulated by the UNMIK Regulation No.2020/45 on the self-government of the municipalities in Kosovo, which includes all the municipal properties, the land, the buildings owned by the municipality. This means that the KTA takes under its administration all the lands and the municipal buildings and excludes the municipalities from their administration. Moreover, this regulation excludes the competences of urban and spatial planning.

Another paradox in the institutional and legal organization is the manner the Special Chamber is organized. Even though within the Supreme Court, it is established as a special body, starting from the secretariat, administration but also for the special rules with regards to the procedures. The paradox is about the fact that the Chamber in terms of the content is an international organization, whereas the Supreme Court is a domestic institution. According to this, Kosovo can be held liable before the international rules for the actions committed by an institution outside of its competences.

According to UNMIK Regulation 2002/12, the newly established Enterprises from KTA enjoy the right to use the property, but not the ownership.

### **4. RESEARCH AND FACTS**

In another paper for discussions for the international conference mentioned earlier, it is stated that "One of the first questions that every investor asks for is: Does the company possess the

land and the buildings and upon what security basis the property right I acquire are respected". But, as stated above, the land and the buildings of the SOEs are unclear with regards to the ownership. This problems didn't seem to be solved any time soon, even though the UNMIK offered a sort of security. However, the right to use didn't enable the investors to alienate or sell the assets to the third parties, to put them as collateral (mortgage) for loans, therefore, these usage forms were invalid for the needs and conditions of the free market economy. This is very discouraging, especially for the foreign investors.

The undefined status of Kosovo was the main obstacle that UNMIK didn't not allow the transformation of social property into private property. But as a guarantee solution, the Pillar IV of UNMIK reforms and redefines the usage right to use the social property through extending the concept of the usage under the possession, usage, alienation of the right to put it as a mortgage for a period up to 99 years upon the day of the approval of the Regulation.

So, the aim was to redefine the usage right of the property as close possible to the property right, similar with the leasing of the property, but without transforming it. Even though only in Kosovo, pursuant to the UNMIK Regulation, the notion "social property" continued to exist, while in all the other former Yugoslavian countries through laws and other legal acts, this form of property was transformed and as such it does not exist as a notion.

An open issue remains the case of the lands of the Socially Owned Enterprises that can not be incorporated, but that will be direct subject of the liquidation process. These assets again won't have the opportunity to use the modified manner of use, the municipalities through this regulation are left out of the process for the administration of social property. Lastly, this regulation does not solve the compensation problem expropriated through discriminatory laws of the communist power, whose properties were nationalized or confiscated without compensation and reward. Failing to solve these problems, in a way it looks like it legalizes the illegal actions of the communist state.

These solved matters as well as the unresolved ones through the UNMIK Regulation are contrary to UNSC Resolution 1244, that guarantees the high degree of economic self-determination, which means that who is going use the economic resources. However, this right was not used from the Self-Government Institutions due to the lack of cooperation between political parties for different matters, and in this case about the problem of privatization and the status of the property.

The Decisions of the Special Chamber are taken with at least the votes of three judges. This Special Chamber may bring decisions even without holding any session if there is no need for compensation and if the Chamber assesses that there is not enough evidence to solve the case. If we take a look at the composition of the Special Chamber, we can easily conclude the absolute domination of the international judges over the local ones in this Chamber as provided by the Law on Special Chamber. Rules of Procedure of the Special Chamber foresee the establishment of an administration completely separated from the Supreme Court's administration, it means that the Special Chamber has the Secretariat as well as the special secretariat. According to this Regulation, the Secretary should be international. The special rules, special secretariat and the special secretariat of the Special Chamber make this Chamber a "Special International Chamber" which is connected with the Supreme Court of Kosovo only formally.

This form of the organization of the Special Chamber holds another paradox, but also a risk for the Kosovo Institutions. On one hand, this institution is formally attached to the domestic institutions, but on the other hand, the actions of this Chamber are out of the institutional control and from the Kosovo institutions. According to this organization, the decisions are made by the international judges, whereas the responsibility for their implementation is left to the Kosovo institutions. As a consequence, Kosovo may be liable for the actions that have not been under its competence and influence even before the international rules (after the declaration of the independence).

After the entry into force of the Kosovo Constitution, on 15th of June 2008, applicable laws in the territory of the Kosovo are considered the laws adopted by the Kosovo Assembly, which have amended all the UNMIK Regulations. One of these laws is the Law on Kosovo Privatization Agency which established the Privatization Agency of Kosovo (PAK) as successor of the Kosovo Trust Agency (KTA) which undertook all the responsibilities, including the representation in the litigation for the cases at the Special Chamber.

However, in this process of changes, transformation of competences and responsibilities, something ambiguous and confusing occurred. According to the Decision of the Special Chamber (No.ASC-09-0089), this institution does not recognize the Law on Privatization Agency of Kosovo (PAK) considering that "The only applicable law in Kosovo are the UNMIK Regulations, which can not be abolished by the Kosovo Assembly". As we can see from the content of this Decision, the Special Chamber does not recognize PAK as a legal entity or even as a party. The Supreme Court of Kosovo (SCK), within which institution operates the Special Chamber has concluded that by this action, the Special Chamber has violated the Kosovo Constitution, since it does not recognize the laws adopted by the Kosovo Assembly and as a consequence it ignores the existence of Kosovo as an independent state. This action from the Special Chamber violates the Law on Contested Procedure as well, since it violates the basic principle of the opportunity to listen the other party in the litigation.

The ignorance of the actions of the Special Chamber has brought multiple damages to the privatization process as whole and as a consequence, these damages are almost irreparable. Among these decisions that brought these consequences were: Decisions of the Special Chamber with regards to Trepca, then with Privatization Fund, Pipe Factory, etc.

Since the procedures conducted for the sale of the shares of an enterprise are stipulated only in the "Tender rules", according to which the Board of the Trust Agency may postpone or cancel the tender at any time for any reason according to its own will, then Special Chamber changed its position with regards to this rule. Initially, the Chamber allowed the Trust Agency a wide choice to cancel the tenders. Then, the Chamber, changed its position and asked the Agency to act properly. Lastly, the Chamber classifies the Agency as an administrative body, whereas the action to cancel the tender as administrative decision that should fulfill the requirements of the Law on Administrative Procedure.

In case when an enterprise can not fulfill its own obligations for six months and when the obligations exceed the value of its own assets, then the Agency may apply for its reorganization of that enterprise. In these cases, the Special Chamber orders the reorganization procedures, respectively the "Moratorium Decision" is adopted. This decision aims to protect the enterprise from the creditors, since during the moratorium period, all the actions are suspended and for any claim against the enterprise and its assets can be commenced only upon the consent of the Chamber. When an enterprise is set under Special Administration, the Special Chamber appoints an interim administrator, empowered to run the enterprise even though in some cases it should require the approval of the Agency or Chamber's.

The Chamber has assigned itself a special role with regards to the approval of the plan for reorganization of the enterprises. In this case, all the lawsuits against the Socially Owned Enterprises (SOEs) and their obligations are reformulated and governed according to a prior approved plan. Despite the substantial role of the Chamber, the administrator of an enterprise may reject to conduct their final evaluation. After systematization of the complains and lawsuits from the Administrator, the Special Chamber reviews and handles them according to their priority. After the approval of the procedures by the Chamber and after the confirmation of the reorganization of the enterprise, everything before the reorganization are automatically erased together with enterprise's requirements. Through this, the enterprise is considered recovered and may operate without restrictions or continuous supervision.



Appeal review procedures in the Special Chamber are specific. In cases of the complains submitted to the Special Court, the President of the Panel appoints the Reporting Judge which reviews the regularity of the formal complain. According to the analysis of the case, he estimates if the procedure should continue; if the case is complete, the procedures resumes through delivering it to the defendant. If this is not the case, the panel treats the cases as inadmissible. With regards to formulation of the decisions, it should be noted that during this process, the English language prevails the two other official languages that are applicable in Kosovo, the Albanian and the Serbian language.

If a complain is submitted only in English, it is considered complete, but if a complain is submitted in Albanian, the Reporting Judge will treat it as incomplete and as such it will be rejected.

Another element worth noting is the fact that until recently it was not possible for KTA to review the list of the employees, whereas they were not eligible to submit their complains to the Special Chamber. Since 2006, after the issuance of the Administrative Direction (No.2006/17), KTA was authorized to publish and to correct the lists of the employees and then if there was any complain, they will be reviewed by the Chamber acting as second instance.

Also, in the cases where the Special Chamber refers the cases to the regular courts, the Chamber reserves the right to review the complains as the second instance.

As it has been noticed based upon the analysis of the legal acts, but from practical experience, too, in most of the cases of the decisions of the Special Chamber, there is no appeal procedure possible. The right to appeal the decisions of the Special Chamber was enabled only after the declaration of the independence.

Another concerning issue with regards to the proper running of the daily works of the Special Chamber has been the workload with multiple functions from the judges of this Chamber. This way, in many cases, when a judge was assigned to review the lawsuit, which he had to decide whether it was or not complete as Reporting Judge. In the next phase of the procedure for the same case, the same judge was member of the reviewing panel in reviewing the same cases.

Therefore, besides this, it has been obvious that the delays in the judgement procedures, administrative mistakes and other weaknesses of different nature have characterized the work of the Special Chamber during the period that this paper aims to review it.

## **5. CONSLUSION**

Kosovo is the last country in Europe that has started the transition and privatization process. Also, the start of this process in Kosovo has been specific due to the political and economic circumstances that it went through in the last decade of the previous century.

The transition and privatization process in Kosovo has been led by the international structures which has administered Kosovo pursuant to the Resolution 1244 of the UNSC.

Privatization in Kosovo has been implemented through a special model known as Spin off method and another sub-type known as Special Spin off. According to this method, the old Socially Owned Enterprise has been separated and from its assets, and a new enterprise without obligations had been established. The old enterprise remained separated from its sound assets but with inherited problems from the past.

The financial means accumulated from the sale of the assets have been saved with good faith in the Trust Fund. Currently, these financial means are blocked in this Fund and are completely out of function and as such they haven't contributed in the economic development of the country.

The Special Chamber has not been efficient in arranging the cases and as a consequence, there have been delays with procedures for many years. This had as a consequence the delay for the payment of the 20% for the former employees of the privatized enterprises.

A high degree of not functioning efficiently has been demonstrated by the Privatization Agency of Kosovo as successor of KTA. Due to the fact that expiration of the mandate of the Board members, for the last two years it has been completely non functional. This non functionality has been served also with legal interference from the high state structures for illegal embezzlement and profit purposes.

The expectations for a positive economic development have not been achieved and this can be argued with low performance from the privatized enterprises, influence in the employment, export and increase of the GDP.

Therefore, I consider that this process in Kosovo is unsuccessful and may be even a failure.

## LITERATURE

1. Berisha, A. D. (2012). *Privatization and Performance of the Enterprises in Kosovo*. Prishtina: RINVEST.
2. Cemovich, R. (2001). *On Analysis of UNMIK Regulations and Pre-existent Yugoslav Laws Related to Agricultural Land Privatization/Commercialization in Kosovo*. Prishtina: International Fertilizer Development Center and USAID.
3. Demekas, D. D. (2002). *Kosovo: Institutions and Policies for Reconstruction and Growth*. Washington, DC: International Monetary Fund.
4. Dérens, J.-A. (2003). *Reconstructing states: Protectorate of Kosovo*. Le Monde diplomatique.
5. Ehite, O. C. (2002). *Factors of the success or failure of the privatization of SOEs in Kosovo*. Prishtina: RIINVEST.
6. Forumi 2015. (2008). *Privatization and post privatization in Kosovo*. Prishtina : Forumi 2015.
7. Frye, B. (2007). *Kosovo: Buried Treasure*. Transitions Online.
8. García-Orrico, D. (2009). 'Kosovo', in *Security Council resolutions under Chapter VII: Design, Implementation and Account - abilities*. Madrid: FRIDE (Fundación para las Relaciones Internacionales y el Diálogo Exterior).
9. Gashi, H. (2011). *The legal conflict regarding the privatization of socially owned enterprises: Amendments to the Law on the Special Chamber of the Supreme Court, the Law on PAK and other relevant laws*. Prishtina: Institute for Advanced Studies GAP.
10. Gould, J. A. (2007). *Privatization and Political Institution Building in Kosovo and Bosnia & Herzegovina*. Washington DC: IREX (International Research & Exchanges Board).
11. Hamidi, L. (2009). *Elections pave way for Kosovo privatesations* . Prishtina: BIRN.
12. Hashi, I. (2004). *Privatization, Increases and Decreases*. UK: Forumi 2015.
13. Ignatieff, M. (2003). *Empire Lite: Nation-building in Bosnia, Kosovo and Afghanistan*. London: Vintage.
14. Kastrati, I. (2012). *Rrënimi dhe rimëkëmbja e Kosovës: 1998-2005*. Prishtina: Oda Ekonomike e Kosovës.
15. KIPRED. (2005). *THE UNITED NATIONS MISSION IN KOSOVO AND THE PRIVATIZATION OF SOCIALLY OWNED PROPERTY: A critical outline of the present privatization process in Kosovo* . Prishtina: Kosovar Institute for Policy Research and Development.
16. Knudsen, R. A. (2010). *Privatization in Kosovo: The International Project 1999–2008*. Oslo, Norway: Norwegian Institute of International Affairs.
17. Kosovo Privatization Agency. (2002). *Operational Policies of the KTA*. Prishtina: Kosovo Privatization Agency.
18. Kosovo Privatization Agency. (2009). *Working report August 2008 - August 2009*. Prishtina: Kosovo Privatization Agency.

19. Luboteni, G. (2002). *Kosovo's banking system and opportunities of his own to contribute to the process of privatization*. Prishtina: RIINVEST.
20. OSCE. (2008). *Legal Review of the KTA matters by the Special Chamber of the Supreme Curt*. Prishtina: OSCE-Monitoring Department.
21. RIINVEST. (2004). *Social Enterprises and their Transformation*. Prishtina: Institut for Ekonomik Research RIINVEST.
22. Selmanaj, S. (2006). *Globalization and Transition-dilemmas and Challenges*. Prishtina.

## HOW MUCH DOES IT COST FOR ADVERTISERS TO PLACE THEIR PRODUCTS IN MOVIES? CATEGORIES ACCORDING TO THE FINANCIAL BACKGROUND OF THE COOPERATION

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### **ABSTRACT**

*The average budget of American blockbuster movies has now reached 100 million US dollars. It is no wonder that product placement has become almost essential in the financing of these films. But how much does it cost for advertisers to place their brands in movies, and what is the basis of pricing? Does it actually cost money, or is it a barter? Is it perchance placed for free, or do filmmakers even pay the brands appearing in the movie?*

*Experience shows that certainly there is no standard way of product placement (especially in the case of movies), thus there is no standard pricing, either. Therefore this article first presents the factors affecting the cost of a specific product placement, then divides the possible ways of cooperation into three basic groups: barter agreements, paid placements, and cross promotions. This is followed by unique placements with brands appearing in films free of charge, and examples with filmmakers paying brands for their appearance in the movies. Last, but not least, the most peculiar kind of brand placement is discussed: brands paying for not (!) being featured in a film.*

**Keywords:** *Branded content, Branded entertainment, Cross-promotion, Pricing, Product placement*

### **1. INTRODUCTION**

How can we define product placement? There are many authors, most of them marketing professionals who wrote on the topic of product placement. And, equally, there are so many definitions as well (Dudovskiy 2012). These include the following three:

- A product is placed in a movie or television show in exchange for payment of money or other promotional consideration by the marketer (Gupta - Gould, 1997).
- A marketing tool where a product is put into a movie scene, or its brand name is heard. (Lehu and Bressoud, 2008)
- Paid product message aimed at influencing movie or television audiences via the planned and unobtrusive entry of a branded product into a movie or television program. (Balasubramanian, 1994)

Although product placement has a history of several decades, it has become increasingly significant and inevitable in the United States and Europe in recent years. According to research in America conducted by PQ Media, a company specialised in media research, while advertising spending for this purpose was only USD 190 million in 1974, it was USD 512 million in 1985, USD 1130 million in 1994, and USD 3458 million in 2004 (Lehu, 2009). It has since exceeded the magic threshold of USD 10 billion. (Onlinemba.com, 2011).

At the same time, if we examine the Top 40 list of Hollywood movies, we can see that the average number of product placements per movie was 17.8 in 2011. (Brandchannel.com, 2012). However, brands do not only appear in movies but also in series, reality shows, talent shows, video clips, computer games, and so on.

This has several reasons:

- changes in consumers' relationship to advertising
- technological progress (mainly digitalization),
- the reform of advertising,

- the needs of film and TV show production companies, and
- changes in the legal environment. (Papp-Váry 2015a)

As a result of all these, product placement is in a certain sense the TV advertisement of the 2010s. While traditional advertising, and especially 30-second TV spots experience increasing difficulties, the new genre is booming. Marketing literature, however, has only been catching up with practice recently. At this point there are no comprehensive publications on the categories of product placement, or how it should be divided into categories. The author of this article recommends the grouping methods listed below:

- by the position of the product placement within the film/programme (see Papp-Váry 2015b)
- by the type of the products placed,
- by the position on the product lifecycle,
- by the brands placed,
- by the financial background of the cooperation.

This article will focus on the last method.

## **2. THE MAIN ASPECTS OF PRICING PRODUCT PLACEMENT IN MOVIES**

How much does it cost for advertisers to place their brands in movies? Well, as there is no standard way of product placement (especially in the case of movies), there is no standard pricing, either. It may be impossible to list all the relevant aspects, but the factors listed below may affect the price of product placement (with a strong focus on movies, since other genres are not discussed by this study):

- The reputation and power of the brand that is placed (film producers may ask for more money from Coca-Cola than an unknown soft drink brand).
- The budget of the movie (the bigger it is, the more viewers the film is likely to reach, therefore a bigger budget is required for the placement).
- The type of movie (for example, product placement costs more in the case of sequel movies, parts 2 or 3, where success is likely).
- Actors in the movie (there are popular actors such as Tom Cruise, whose name serves as a guarantee for the number of viewers).
- The director (similarly to the previous case, a Spielberg movie will probably attract many viewers, while we would not expect the same from an unknown director. The director's attitude towards product placement is also important here: Michael Bay almost loves it, but David Lynch avoids it as much as possible).
- The producer (there are experienced producers whose "delivery" is more reliable, thus the placement solution will be better).
- Distribution (how many movies, how many theater rooms present the movie at the same time, that is, how many people does it reach).
- The role of barter (to what extent can products or services replace money in the support of movie production – of course barter agreements also cost money for advertisers, but they may be more favourable).
- The noticeability of the brand in the movie (how complete the display of the product is, or how active and noticeable the brand is).
- The number of placements (how many times the brand appears in the movie).
- The length of placements (for how long, how many seconds the brand appears).
- The prominence of placement (if we see the brand in the foreground or the background of a shot).
- Position on the screen (whether the brand appears in the middle or the side of the screen – the former is better).
- Integration into the story (how much the brand is incorporated in the plotline).
- Integration into the scene (how important the role of a brand is in a given scene).

- Integration with the actor/actress (how much the well-known actor/actress uses the brand in the film).
- How many (and what sort of) brands appear in the movie (first of all, it is important that the products of competitors are not placed in the same movie. At the same time it would be easy to say that films should include as few brands as possible, in order to make its placement and presence as exclusive as possible. However, this is not practice. It is often worth including brands in movies with other prestigious sponsors).
- Additional communication (what support the movie receives, and in what forums).
- The opportunity to be placed multiple times (for example, the brand does not only appear in the movie itself, but also in the trailer, or on the website of the movie).
- Is the agreement made through an agent, or directly (an agent always asks for some commission, but is able to represent the interests of the client more effectively in several cases, and uses a more professional approach, therefore it is worth the investment).

We could mention several other aspects, but the ones listed above are probably the most important. These aspects will be further discussed in the various sections of this study, but let us now examine what financial transactions take place in product placement.

The average budget of American blockbuster movies reached 100 million US dollars in 2004 (Lehu, 2009). It is no wonder that product placement has become almost essential in the financing of these films. However, this does not necessarily involve money. Barter agreements and combinations of paid product placement and barter are also quite common. There are cases when filmmakers receive support from the brand for the campaign of the movie. Sometimes not very often though, brands appear in films free of charge. We can also see examples with filmmakers paying brands for their appearance in the movies. Last, but not least, the most peculiar kind of brand placement is when a brand pays for not (!) being featured in a film. Let us see a couple of examples.

### 3. BARTER PLACEMENT

In the case of a barter agreement, advertisers do not provide financial assistance for the filmmakers, but they make their product/service available for them. They either give it to them forever, or provide it for the shooting. Some of these are directly connected to the movie, while others serve the comfort of the crew. A typical scenario present since as early as the time of the first silent movies was that a scene set in a certain restaurant was "financed" by the restaurant owner as he provided the scene and catering for the film crew. Car brands also use this kind of product placement by providing transport for the crew. Computers are also essential for filmmakers, so they can also serve as a barter. Just like clothes or transport companies – brands that filmmakers can integrate into the movie greatly: "We will fly British Airways in the movie if you secure tickets for the crew to our shooting locations." Of course they may also play a passive, merely complementary role, or they may only appear in the credits without any noticeable appearance in the movie itself.

Let us see some examples. The manufacturer of the Mini brand provided 32 cars for the filming of *The Italian Job*, released in 2003. In addition, these were specially adapted wheels as they were required for the transportation of gold in the movie (Donaton, 2005). Moreover, the actors were trained how to drive these minicars in the best way possible during the various scenes of the movie.

*Matrix 2* featured 24 Cadillac CTSs and Escalade EXPs (and with a purpose-built highway section) that were provided for the famous highway scene of the movie. *Herbie: Fully Loaded*, however, only received a VW Touareg and a VW Beetle from Volkswagen because the car company was not sure that the film would be successful – they also knew that a Herbie movie could only be shot using a Volkswagen, and not another brand (Lehu, 2009).

According to regular reports by PQ Media, a research and consulting company tracking media spending, barter agreements still make up the vast majority of product placements (Lehu, 2009).

#### 4. PAID PLACEMENT

In this case the brand pays for being included in the movie or programme, thus it is similar to the traditional way of reserving airtime for advertising spots.

In 1975, Clairol paid 10 thousand US dollars to appear in *Smile*, a comedy by Michael Ritchie. The placement was important for the cosmetics brand because the storyline features thirty-seven beautiful girls competing in the beauty pageant Young Miss America.

Sponsors provided 25 million US dollars of the 102-million-dollar budget of *Minority Report*, released in 2002. Moreover, some sources state that advertisers of *Die Another Day*, an episode of the James Bond series, provided 120-160 million US dollars of the movie budget (Lehu, 2009).

Although the dominant car brand of the James Bond movies is Aston Martin, there have been examples when money has had a say in brand placement, and Pierce Brosnan sat in a BMW – and all this for only 25 million US dollars. On the other hand, Daniel Craig (also) drives Ford in *Quantum of Solace* – the brand paid 35 million US dollars for the placement. (We also have to add that Aston Martin belongs to the Ford Group, too.) (Lehu, 2009)

The price of paid product placement in movies is defined before the production of the movie, and the sponsor transfers the amount, or at least a part of it. In the case of TV programmes, invoicing may also be second-based, or it can be based on GRP, a measure of reach, too.

Maybe this is the reason why the ratio of paid product placement is increasing: while it was 18% in 1974, it increased to 29.3% in 2004 (Lehu, 2009).

Moreover, records of product placement are broken continuously: the makers of the latest *Superman* movie titled *Man of Steel* gathered 160 million US dollars from 100 companies for their placements in the movie. Examples of brands appearing in the movie include Gillette, Walmart, Kellogg's, Nokia Lumia and Chrysler.

#### 5. CROSS PROMOTION

Movie makers have an increasing need for such agreements, because in the United States it is typical that the budget of the movie is accompanied by a marketing budget of the same amount in order to secure success (Lubbers – Adams, 2001).

In this case the brand actually supports the advertising campaign of the movie: it either contributes to the media budget, or the film appears in the campaign of its own product. We can also say that the advertiser and the film production advertise each other in such cases. The advertiser is free to use the figures or scenes of the movie, therefore movie and advertisement combine. This kind of promotion is also used in cases when the brand itself does not appear in the movie, because it would be rather strange, or would not fit in.

The appearance of Reese's Pieces in *E.T. the Extra-Terrestrial* can actually be regarded as a cross promotion. American chocolate manufacturer Hershey Foods provided 1 million dollars for the advertisements of the movie, in exchange for of the appearances of E.T. in their own advertisements. Musette Buckley, a vice president at Warner Bros. goes as far as to say "it was a lousy placement – a couple bags of Reese's Pieces in the dark. (...) If you hadn't been told by Hershey in a major promotion that those were Reese's Pieces, then I doubt you'd ever know." (Turcotte, 1995)

We could mention many examples of similar cooperations ever since. Brands appearing in *James Bond* films often promote them, also elevating their own image at the same time. This tool is used by Heineken, Omega, Smirnoff, Sony Ericsson and Ford, etc. In reference to *Men in Black*, Ray-Ban placed life-size cardboard figures of Tommy Lee Jones and Will Smith in their shops, with Ray-Ban sunglasses on, of course. The slogan referred to a quote by Will



Smith from the movie: "I make this look good." (Robinson, 2001). Audi R8 V10 Spyder was not only featured in the movie *Iron Man 2*, but also promoted it in its own posters and commercials. In the case of *Must Love Dogs*, the online dating website perfectmatch.com organized media appearances worth 7 million US dollars for the introduction campaign of the movie (Stanley, 2005).

The movie *Curious George* is about a monkey, whose favourite food is what else than bananas. Therefore the Dole brand advertised the movie on real bananas, involving a total of 100 million pieces (Lehu, 2009). In the case of *Legally Blonde*, a scaled-down version of the character appeared – of course in the Barbie collection of toy manufacturer Mattel. The movie *Akeelah and the Bee* was promoted by Starbucks. The material about the movie was placed on the paper rolls around the glasses. It is interesting that Starbucks requested a share from the profit of the movie, the DVD edition and the soundtrack CD in exchange (Schiller, 2006). The movie *Sex and the City* was promoted by a lingerie brand offering four panties in a pack, assigning a colour to each character: Carrie – pink, Samantha – black, Miranda – blue, Charlotte – purple.

This solution is especially important for fast-food restaurants as these can easily promote movies in their restaurants, and engage in cooperation with the makers of movies where it would have been difficult to appear dramaturgically.

In the case of *Shrek*, the characters of the movie appeared in McDonald's Happy Meals for children, and healthy apple chips and milk were also packaged "in Shrek". As result of this cooperation the sales of Happy Meal increased by 16% (Charette, 2010).

Burger King has used cross promotion in connection with a lot of movies. For example, they popularized Schwarzenegger's *Last Action Hero* this way, also creating a campaign commercial and a special glass. Similarly, in the case of *The Twilight Saga: New Moon*, customers could choose a cup with Edward or Jacob on it. Customers could also collect scaled-down copies of *Transformers* robots with Burger King menus. Star Wars did not miss the Burger King series either: people could collect 31 characters after having eaten a considerable amount of burgers. However, the most peculiar example was a cooperation in France, when a fast food chain was selling Dark Vader burgers with jet black buns (Geekosystem.com, 2012).

## 6. FREE PLACEMENT

In this case, the placement of the brand is free of charge, with no financial transaction or barter in the background. It is no surprise that while 24.3% of placements were of this kind in 1974, the ratio was only 6.6% in 2004 (Lehu, 2009). The tool, or some types of it are also called *product plug*, with two major forms. In the first case the filmmakers think that a brand is *dramaturgically important* and raises the credibility of the movie, while in the second the brand is placed in the film as some sort of a *favour*.

Examples to the former include *The Da Vinci Code*, where the makers of the movie did not ask any money for the appearance of a Smart. The reason was that the two protagonists flee with a Smart in the book version, and the filmmakers wanted to stick to the original story, and Mercedes-Benz probably would not have paid any money for the same reason. Another well-known example is *The Gods Must Be Crazy*, where the whole story revolves around a Coca Cola bottle, but Coca-Cola Company did not pay for the placement; moreover, they were not even contacted by the filmmakers before the movie was shot. An even more exciting example is the movie *Coca-Cola Kid*, whose story is based on an American sales executive arriving to Australia, in order to help boost soft drink sales. The appearance of Coca-Cola was evident considering the storyline, and the filmmakers did not receive any financial support from the brand.

Now let us see examples to the other major form of free placement, that is, placement as a favour. For example, Napa Valley wine brand Clos Du Val is famous for sending wine to film



crews. This is how they were included on a famous scene of *The Terminal*, where Tom Hanks and Cathrine Zeta-Jones clinked glasses with Clos Du Val.

Guinness set up small beer barrels in the dressing rooms and homes of Hollywood stars such as George Clooney, Ben Affleck, and David Arquette. It did not take much time to see Guinness in movies, and the brand soon became a favourite of movie stars (Wipperfürth, 2005, 295–296.).

Carlsberg Lager delivered some trays of beer for the crew of the movie *The Interpreter*. As a result, one of the scenes features Nicole Kidman drinking this beer during a conversation with Sean Penn. The movie attracted a lot of moviegoers, so those trays of free beer paid off indeed (Privátbankár.hu, 2005).

Black&Decker regularly sends various accessories to filming locations, for example, tape measures. The product appears in several movies in exchange. Staples places its staplers the same way.

Now let us see an example from Hungary: in the case of the movie *Papírrepülők (Paper Planes)* Food Express delivered food for the crew, and they did not ask for anything in return. The director smuggled a sequence in a scene, where one of the key characters is eating a box of Food Express food. He did it purely out of gratitude, because the food delivered to the crew was great help during the shooting (Papp-Váry–Szöllösi–Boldizsár, 2009).

## 7. WHEN FILM PRODUCTION COMPANIES PAY THE BRANDS

Such situations occur quite rarely, but there are a few examples. In the case of *Mission Impossible*, released in 1996, they paid TGV (France's high-speed train service) for their placement in the movie, and the provision of filming locations for some scenes. The filmmakers obviously had to pay the bill because the company had to close a track section, and the train provided for the shoot was out of service for the time of the filming.

## 8. DISALLOWANCE

Sometimes brands explicitly prohibit filmmakers from including them in their movies. Normally directors/producers do not need to ask for a permission to feature a brand in Hollywood movies. However, placements may depict brands in a not so positive light, which is something brand owners would like to avoid.

If we are looking for the first negative product placement, we must travel back in time until the year 1968, just to rocket ourselves to the future, as the first such placement appeared in a space movie produced that year: the film was the famous *2001: A Space Odyssey* directed by Stanley Kubrick. One of the main characters of the story is the computer of the spaceship, equipped with artificial intelligence – due to a programming error the machine thinks that the crew is a threat to the mission, and kills all of them but one. Kubrick wanted to use an IBM computer, but the management of the company – understandably – did not agree to it. The director then decided to use the name HAL for the computer, based on the fact that in these alphabet these letters come right before of the letters of IBM. The audience soon realized that Kubrick wanted to refer to IBM, and they identified the evil supercomputer with the brand (Roberts, 2004, 29.). There is no doubt that the idea originated from the director as there was no real competition for the computer brand in 1968, willing to pay for this kind of placement. But what is the situation with contemporary series, where villains use IBM or some other PC, while good people use Apple?

There have been arguments about the possible identity of the company paying for the way Coca-Cola was depicted in the movie *Pearl Harbor*. In the military hospital scene we can see that blood is collected in Coca-Cola bottles. This can also be interpreted in a positive way: they were on hand in difficult situations. At the same time, they can also be interpreted as objects that are not good for anything else than collecting blood in an empty bottle. The latter

interpretation is also possible because Pepsi appears some time later in the movie, and not at all in such a peculiar situation, says branding expert Martin Lindström (2010).

Nevertheless, the literature of the field named this form *negative placement*. To mention a few examples from 2011, Louis Vuitton appeared in 4 top movies that year: *Transformers 3*, *Limitless*, *Just Go with It*, and *The Hangover Part II*. However, the luxury fashion brand says that it is only three appearances – when a character in *The Hangover Part II* says about his bag "Careful... that's a Louis Vuitton", it is obvious that we see a fake product. Therefore Louis Vuitton sued the filmmakers and the manufacturer of the fake product, claiming that they had harmed the reputation of the company (Brandchannel.com, 2012). Due to Thailand's negative image in the movie, several people also suggest that it might have been sponsored by a rival country, for example Singapore...

Nevertheless, the most negative product placement of 2011 was probably *Crazy, Stupid, Love*. The movie features Ryan Gosling, one of Hollywood's contemporary sex symbols, teaching Steve Carell how to be a real man. One of his clothing tips, and some sort of general philosophy is "Cal, be better than the Gap. Be better than the Gap. Say it."

OK, but how can we prevent such cases? Unfortunately, it is extremely difficult to solve afterwards, therefore it is important that brands receive appropriate information in the preparatory phase. An agent employed by Saab saw a screenplay where a girl was raped on the backseat of a Saab car – he called the production office and convinced decision-makers to use another vehicle (Silje, 2006). The marketing managers of Stolichnaya Vodka refused to appear in the movie *Bad Santa* as the character in the movie is alcoholic and violent, which would have had a negative influence on the brand image (Schiller, 2005). However though, filmmakers do not always get a no-go. In *Fight Club*, for example, they smash the front lights of a Volkswagen Beetle, to which the manufacturer had no objection; moreover, it even paid for the placement. In the same movie, they break in an Apple store – the company did not object to being included either, as the story was about creative characters.

As we have seen above, brands may only rage afterwards in the case of movies, but they can even take steps if it is a TV programme. Although they may not ask for a ban, they can try to influence programme makers, or even the characters. Reuters reported that the Abercrombie & Fitch fashion brand offered a payment to Mike 'The Situation' Sorrentino, a main character of the trash-reality show *Jersey Shore* in August 2011, in order to make him stop (!) wearing the brand. They even issued a press release: "We are deeply concerned that Mr. Sorrentino's association with our brand could cause significant damage to our image. We understand that the show is for entertainment purposes, but believe this association is contrary to the aspirational nature of our brand, and may be distressing to many of our fans" (CNN, 2011).

In the case of another *Jersey Shore* character, Nicole 'Snooki' Polizzi, the Coach designer brand faced a similar challenge: the "lady" took their purse everywhere in the programme. It is okay that the brand did not even have to pay the price of the bag, because the character did it all spontaneously, but her personality was more of a destructive influence for the brand than a constructive one. Therefore marketers at Coach decided to send bags to Snooki – however, they did not send her pieces of their own portfolio, but gear from competitor brands, to make her "build" the rivals' image instead (Everydaymoney.ca, 2010).

There was an even more peculiar case when Lacoste, the French fashion brand contacted the Norwegian police in 2011. It asked authorities to prevent mass killer Anders Behring Breivik from wearing the brand in public. The story is more complicated because Anders Behring Breivik, who admitted killing 77 people in a mass murder on 22 July 2011 in Norway, is a fan of the 'brand with a crocodile', and he once wrote in his diary that "refined people like him should wear brands like Lacoste." (Kreatív.hu, 2011).

## 9. CONCLUSION

As the study has shown, if we examine the Top 40 list of Hollywood movies, we can see that the average number of product placements per movie was 17.8 in 2011. (Brandchannel.com, 2012).

Marketing literature, however, has only been catching up with practice recently. At this point there are no comprehensive publications on the categories of product placement, or how it should be divided into categories.

Therefore this study has presented a possible method of categorization, focusing on how advertisers pay (or do not pay) for the placement of their brands.

As we have found out, there are three basic forms of cooperation opportunities: barter agreements, paid placements, and cross promotions. In addition, we can also see unique placement solutions when the brand appears in a film fully free of charge, or the filmmaker pays a brand to appear in the movie. Finally, we have also discussed the most peculiar case, when a brand pays for not (!) being featured in a film.

Considering all these is particularly important as one thing is clear: the amount of product placement (and, hopefully, its quality) will further increase in the upcoming years.

## LITERATURE

1. Balasubramanian, SK (1994): Beyond advertising and publicity: Hybrid messages and public policy issues (Journal of Advertising, 23(4), pp. 29–46.)
2. Brandchannel.com (2012): Announcing the 2011 Brandcameo Product Placement Award Winners, [http://www.brandchannel.com/features\\_effect.asp?pf\\_id=535](http://www.brandchannel.com/features_effect.asp?pf_id=535), published: 13 February 2012.
3. Charette, Robert (2010): Information From Eight McDonald's Promotion Websites Stolen: Are Millions of Customers Affected?, <http://m.spectrum.ieee.org/riskfactor/telecom/internet/mcdonalds-promotions-websites-hacked-are-millions-of-customers-affected>, published: 13 December 2010.
4. CNN (2011): Abercrombie to Jersey Shore: Ditch Our Brand, [http://money.cnn.com/2011/08/16/news/companies/abercrombie\\_jersey\\_shore/index.htm](http://money.cnn.com/2011/08/16/news/companies/abercrombie_jersey_shore/index.htm), published: 16 August 2011.
5. Donaton, Scott (2005): Madison & Vine – Why The Entertainment & Advertising Industries Must Converge to Survive (McGraw-Hill, New York).
6. Dudovskiy, John (2012): Product Placement as an Effective Marketing Strategy, <http://research-methodology.net/product-placement-and-brand-placement/>, published: 20 June 2012.
7. Dusenberry, Phil (2005): The We Set His Hair On Fire: Insights and Accidents from a Hall-of-Fame Career in Advertising (Portfolio).
8. Everydaymoney.ca (2010): Coach tries to unbrand Snooki by sending her rivals' gear: report, <http://www.everydaymoney.ca/2010/08/coach-tries-to-unbrand-snooki-by-sending-her-rivals-gear-report.html>, published: 25 August 2010.
9. Geekosystem.com (2012): Fast Food Chain Introduces Black Bun Darth Vader Burger, <http://www.geekosystem.com/darth-vader-burger/>, published: 4 January 2012.
10. Gupta, PB – Gould, SJ (1997): Consumers' perceptions of the ethics and acceptability of product placements in movies: Product category and individual differences (Journal of Current Issues and Research in Advertising, 19(1), pp. 38–50.)
11. Index.hu (2013): Superman befelellad a burkolt reklámokba ("Superman drowns in surreptitious advertising"),

- [http://index.hu/kultur/cinematrix/2013/06/04/tele\\_lesz\\_termekmegjelenitessel\\_az\\_uj\\_supearman\\_film/](http://index.hu/kultur/cinematrix/2013/06/04/tele_lesz_termekmegjelenitessel_az_uj_supearman_film/), published: 4 June 2013.
12. Kreatív.hu (2011): A tömeggyilkos ne hordjon Lacoste-ot ("Mass murderers should not wear Lacoste"), [http://www.kreativ.hu/marketing/cikk/a\\_tomeggyilkos\\_ne\\_hordjon\\_lacoste\\_ot#ü](http://www.kreativ.hu/marketing/cikk/a_tomeggyilkos_ne_hordjon_lacoste_ot#ü), published: 9 September 2011.
  13. Lehu, Jean-Marc (2009): Branded entertainment – Product placement & brand strategy in the entertainment business (Kogan Page, London–Philadelphia).
  14. Lehu, Jean-Marc & Bressoud, E. (2008): Effectiveness of brand placement: New insights about viewers (Journal of Business Research, vol. 61., pp. 1083-1090)
  15. Lindström, Martin (2010): Negative Product Placement, <http://www.martinlindstrom.com/negative-product-placement/>, published: 8 November 2010.
  16. Lubbers, Charles A. – Adams, William J. (2001): Promotional strategies utilized by the film industry: theatrical movies as product (Journal of Promotion Management, 2001/1–2., pp. 161–180.).
  17. Onlinemba.com (2011): Everything you should know about product placement, <http://www.onlinemba.com/blog/everything-you-should-know-about-hidden-product-placement/>, published: 17 November 2011.
  18. Papp-Váry, Árpád – Szöllösi, Tas – Boldizsár, Emese (2009): Terjedő termékelhelyezés – Product placement a magyar filmek szemével ("Product placement on the rise – Product placement with the eyes of Hungarian movie makers", Magyar Reklám, June 2009, pp. 32–34.).
  19. Papp-Váry, Árpád (2015a): Product placement and branded entertainment: Why is it more relevant than ever? (In: Jovancai, Stakic A, Kovsca, V, Bendekovic, J (ed.): Economic and Social Development : 5th Eastern European Economic and Social Development Conference on Social Responsibility : Book of Proceedings. 364 p., Belgrade, Serbia, 2015.05.21-2015.05.22. Belgrade: Varazdin Development and Entrepreneurship Agency; University North; Megatrend University, pp. 182-189.)
  20. Papp-Váry, Árpád (2015b): A Possible Categorization of Product Placement Based on its Position within the Film or TV Programme (In: Michelberger, Pál (ed.): Management, Enterprise and Benchmarking in the 21st Century II.: MEB 2015. Budapest: Óbudai Egyetem Keleti Károly Gazdasági Kar (Óbuda University, Keleti Faculty of Business and Management), pp. 267-279.)
  21. Privátbankár (2005): Nicole Kidman félmillió dolláros söre – product placement ("Nicole Kidman's half million dollar beer – product placement"), Gazdasági Rádió, Privátbankár.hu, FM 105.9 articles, <http://privatbankar.hu/html/cikk/hir.php?hir=25792>, published: 21 June 2005.
  22. Roberts, Kevin (2004): Lovemarks – Jövő a márkák után ("Lovemarks: the future beyond brands", Magyar Könyvklub, Budapest)
  23. Robinson, Jeffrey (2001): Manipulátorok – Vásárló lesz, ha tetszik, ha nem ("The Manipulators: Unmasking The Hidden Persuaders", Athenaeum 2000 Kiadó, Budapest).
  24. Schiller, Gail (2005): Ties-in sobering for liquor firms (Hollywood Reporter, 3 August 2005).
  25. Schiller, Gail (2006): Starbucks brews film deal (Hollywood Reporter, 13 January 2006).

26. Silye, Dániel (2006): Általánosságban a Product Placementről ("About product placement in general"), <http://flickpromotion.blogspot.com/2006/10/ltalnossghan-product-placementrl.html>, published: 27 October 2006.
27. Stanley, T. L. (2005): Must Love Dogs becomes product placement bonanza (Madison & Vine, 13 July 2005).
28. Turcotte, Samuel (1995): Gimme a Bud! – The future film product placement industry (University of Texas at Austin, 1995, <http://advertising.utexas.edu/research/papers/turcotte/index.html>, download: 31 January 2008).
29. Wipperfurth, Alex (2005): Elterített márkák – A marketingmentes marketing ("Brand Hijack: Marketing Without Marketing", HVG Könyvek, Budapest).

## CHARACTERISTICS OF THE LABOR MARKET, EMPLOYMENT POLICIES IN KOSOVO AND EUROPEAN UNION IN THE YEAR 2014

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### **ABSTRACT**

*The level of economic development of Kosovo is reflected in a delay of many economic parameters in place which results even in the strangulation of the labor market as the biggest challenge in Kosovo. Would not mind that the most worrying aspect of the labor market in Kosovo is the high unemployment rate which reflects with the numerous problems in Kosovo society.*

*The labor market in Kosovo during the period 2002 to 2013 was consistently followed by a different set of anomalies which have led to the raising concerns of the Kosovo population which are reflected not only by the unemployed, but also the active part of the population which in the absence of functioning of the collective contract, failure of unions, low average wage and a series of violations of workers' rights more and more is undergoing development gap in the labor market.*

*Kosovo is the most highest rate of unemployment in the region which is around 50%. And when we consider the composition of contingent labor, such as very young population which annually makes contingent labor increases in parallel with this also increases the rate of demand for labor and immigration as the feature itself, then the approach should become much more serious. Unemployment rate by SOK has increased from 2002 to 2012 on an average rate of 0.8% per year. This percentage was in the beginning more sensitive, but since 2005 has started to have a slight increase.*

*From the statistical data shows that unemployment is the highest in young persons (16-24 years), this age includes about 40% of the total number of unemployed. Also, the unemployment rate appears too high even to women though are not very active. Viewing these data mean that unemployment in Kosovo is mostly long term it is estimated that about 80% of the unemployed are long-term unemployed for more than 12 months. This condition appears as unemployment will remain for a long time the main challenges of the economy and society in general. To make this situation more clearly we take data of the macroeconomics department within the ministry of economy and finances showing that to remain in the same level of current unemployment should be a real increase of the Gross National Product of 4.7% while if we would halve unemployment by 2025 would require a real growth of Gross National Product more than 7.3%*  
**Keywords:** *Economic development, Employment, Labour market, Unemployment*

### **1. INTRODUCTION**

At first glance unemployment is attributed more to poor countries and countries in political and economic transition, but nowadays unemployment has included countries with high growth! To talk about unemployment is a special thing for me, but to talk about unemployment in the European Union represents for me a great privilege, although probably will not give any solution about unemployment, but I will try at least to give a definition and explanation, or maybe even a real thing how to come to a better employment and higher economic stability growth in the EU. The issue of unemployment is and always has been one of the biggest problems of macroeconomics, where experts in this field always had to be visionary at the right time, at the right time and in the right way to take actions that will not cause any economic collapse that will cause then macroeconomic disorders.



Economic problems have always been a challenge for the leaders of this subject that always follow the most progressive ways that in their country enable higher employment, better development, a better future for the youth, people, place and the globe in general, because a proverb says: "The economy is in recession when your neighbor is unemployed, falls into crisis when you become unemployed" (Harry Truman). This statement suggests that the unemployment issue requires to be careful that the best way is to create the most progressive methods to reach to send the country into higher economic development. Unemployment in the EU Almost in most European Union countries is growing. This redundancy according to experts of the economy are caused as a result of not drafting properly macroeconomic policies. Countries that are in the greatest crisis of unemployment are Greece, Spain, Italy, France and several other member states of the EU, but among those who mostly have problems with unemployment and its economic viability is Greece, which, despite the large funds that are provided by the IMF (International Monetary Fund) and WB (World Bank), still continues to have great problems in its financial system.

The economic problems in Greece known, German magazine, Der SPIGEL, a few days ago published that: the black hole in Greece's budget is 20 billion euros. The magazine refers to data collected by Greece's international creditors. "This amount is twice as the initial calculations. Greece can receive the next tranche of financial aid only if it cover this deficit", writes German magazine. Since June, Greece is waiting for this installment that worth 31 billion euros, while the recession in the Balkan country is greater than predicted. The Greek economy continues to shrink at alarming rates and forecasts for next year are not optimistic. The draft budget for the year 2013 presented to Parliament by the Greek government provided an economic decline of 3.8 percent for Greece. Meanwhile, this year, the decline of the economy is expected to go up to 6.5 percent, exceeding the initial forecast of 4.8 percent. In the draft budget of the year 2013 are forecasted other austerity measures that would cut public spending, primarily pensions and salaries of administration to 8 billion euros. Cuts and demand of credit international providers are required to deliver the next installment of the loan. For the fifth consecutive year the Greek economy is in free fall and 2013 will be the sixth year. But the worst does not end here. Another report which was published by the Greek Statistical Authority says unemployment in Greece has reached over 25%. More than a quarter of the active population in Greece is covered by unemployment in July with a growing percentage with 25.1 percent against 17.8 percent in July 2011 and 24.8 percent in June, announced Greek Statistical Authority (ASE). "The number of unemployed has reached 1.261 million against 3.7 million people who have been in business," said in a statement ASE.

The unemployment rate in Greece has doubled since the beginning of the debt crisis in 2010. Another analysis that was done by Eurostat says that Greece is one of the most expensive countries in the Eurozone. Although there was five consecutive years in recession, Greece still is one of the most expensive countries in the eurozone, announced the European Agency for Statistics -Eurostat

"Milk and its derivatives are 31.5 percent more expensive than average prices in the eurozone, while the bread and cereals are 16 percent more expensive for buyers", reported Eurostat. Greece is the most expensive even for furniture and electronic equipment. According to the Greek Ministry of Development, the high price of consumer goods is dedicated to expensive transport, especially in the islands, and high taxes.

Economic problems in France .Number of unemployed in France crossed the border of three million people for the first time since 1999, show the data of Ministry of Labour. In August, 23,900 French were added to the ranks of the unemployed, increasing their number to 3.01 million. More troubling was the fact that the unemployment rate rose to 9 percent last month, the 16 th consecutive month that marks the rise. Labour Minister Michel Deo, briefly commented that "these figures are clearly bad". However, the government blamed the previous

administration for this condition. "These three million unemployed are victims of failed reforms and economic policies of the past few years. The government is implementing immediate reforms, but will need to spend some time before first results come ", added the Minister of Labour in his statement. In recent months, some of the largest French companies have cut number of their employees. Together, the automaker "Peugeot", the airline "Air-France KLM", the network of supermarkets "Carrefour" and medical company "Sanofi" have cut tens of thousands of jobs. Alongside the high unemployment which dominates in the country in recent years, France has adopted a new budget that would increase taxes. It will significantly increase taxes, in an attempt to reduce the government deficit to 30 billion euros. . The government hopes to reduce its budget deficit from 4.5 percent of Gross Domestic Product at 3 percent. "This is a fighting budget. A budget to restore the health of the country. A budget to fight the debt that does not stop growing. A budget for social justice. A budget for growth and preparation for the future. It is a sturdy and responsive budget". Two-thirds of the money to reduce the deficit will come from increases of taxes for wealthy families and surpluses and budget cuts. This increase of taxes will affect only 10% of French taxpayers

Economic problems in Spain. The latest data on unemployment in Spain show that Spain is facing its deficit greater that occurred in recent years. Unemployment in the country is alarming that 33% of young people are unemployed. This means that there are more people under 25 who do not have a job, versus those who have. Generally report that Eurostat has made few months ago says that unemployment in Spain is 25%. Spain's public debt has reached in the end of June another historic record with 75.9 percent of GDP, a level of concern, as the country is suffering frp, tension markets.

Spanish debt, which rose by 9.2 points in a year, also passed the limit set by the Stability Pact of the EU by 60 percent, but remains lower than public debt in the eurozone to 88.2 percent in first quarter. Public debt will continue to grow in 2012 as the government has forecast an increase to 79.8 percent of GDP at the end of the year, a forecast that does not take into account the European loan to Spanish banks, which may reach 100 billion euros and increase the debt by 10 points. Spain says the country's economic recession deepens. The Central Bank report that the country's economy shrank during the period from July to September, for the fifth quarter in a row. Also, the number of unemployed in Spain has increased, reaching the figure of 25 per cent of the working population. Kosovo's labour market is characterized by several features that distinguish it from other countries in the region. That which makes the difference is that from all the data indicated that one of third of the population is under 16 and over 50% is up to 24 years. So what affects the level of unemployment from year to year is the biggest entry of young people into the labor market despite high immigration tries to mitigate such a situation, however, the impact of entries can not be mitigated. Because of the special characteristics of the labour market in Kosovo, such as very young population then this mean that those who are unemployed are aged 16-24 years who constitute about 40% of the total number of unemployed. The reason for this is what we stated above because they for the first time enter the labour market. This could express through this table:

Chart 1. The age structure of the unemployed (2012)

Age	Male	Female	Total
16-24	39.2%	41.4%	40.2%
25-34	30.4%	30.6%	30.5%
35-44	18.1%	19.5%	18.8%
45-54	8.0%	6.7%	7.4%
55-64	4.4%	1.8%	3.2%
	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: Statistical Office of Kosovo (SOK), Kosova in figures, Prishtinë, 2005.



Unemployment as a serious macroeconomic disease is a significant cause of poverty in a country. In 2004, wages accounted for 55.2 % of monthly household income, while remittances in cash from abroad accounted for 13.2 % and 10 % were unspecified sources of income.

## **2. EMPLOYMENT POLICIES**

The social protection system in Kosovo consists of social assistance benefits, the basic pension system and invalid pension, completed with a special scheme for war invalids.

Expenditure on social transfers are equivalent to 27 % of the public budget and estimated to incur an annual increase of 3 % over the period 2008 to 2013 (from 113 million. € to 125 million €).

Fiscal and budgetary reforms undertaken since 2001 have generated significant local profits, that allowed Kosovo to increase budget spending, despite a reduction in donations from donors. Between 2003 and 2004 the increase in capital expenditure on wages and public salaries - the latter increased by 20 % - resulting in a fiscal deficit of 5.4 % of GDP. Data from the collection of taxes reveal that over three quarters of the revenue collected at border points and just 11 % at the municipal level.

Enterprise sector in Kosovo is dominated by micro-enterprises. Most firms are organized in the form of self-owned enterprises or partnerships with fewer than five employees, and where 75.2 % of them are individual businesses. Based on data from the business registration office, the percentage of manufacturing activities has increased during the last five years by about one to two % per year. In 2005, about 54,000 companies were registered, 57 % in trade, hotels and restaurants, 8.7 % in manufacturing and less than 1.6 % in agriculture.

Information about the contribution of the manufacturing sector in GDP are incomplete due to the lack of registration of manufacturing enterprises and little information about public and social enterprises (POEs and SOEs). These last two types of enterprises face problems as old-fashioned assets, financial underperformance and unclear employment relationships.

In 2003 it was estimated that there were approximately 16,000 active employees in POE and 18,000 in SOEs, with an almost equal number of employees on administrative leave. The liquidation of these companies and spin-off of their assets began in 2005, where during the same year were sold about 239 companies with a capital of € 160 million.

As we stated above, Kosovo has the highest rate of unemployment in the region, while initially raised some concerns that have characterized the labour market during 2002-2013. Economic stagnation of many parameters in place results even in strangulation of the labour market. Unemployment is not the only concern for the population of Kosovo, part of this concern are the active part of the population who work without regulation of collective contract, low average wages, violations of workers' rights which are consequence of malfunctioning to full union.

Another problem is the creation of an inappropriate macroeconomic policy to provide conditions for the operation of the national labour market, which would maintain current jobs and create new jobs.

The average age of the population in Kosovo belongs to the young and able to work. Employees or those who continuously seek work are only 58 % and it precedes a low standard and a poor economic situation.

Reforms in the education system, tax breaks for private sector benefits in the field of agriculture, stockbreeding and other areas, will create new conditions of employment, greater economic circulation and all of this will directly impact on improving labour market and social welfare.

The most troubling aspect are inadequate policies governed by the relevant institutions till now or to say it clearly complete failure to the problems created over the years and their collection and solution that is becoming more and more complex.

### 3. CHARACTERISTICS OF THE LABOUR MARKET

Regarding this will mention some features that the years have followed the economy of Kosovo from which is directly affected the labour market.

- Tightening of tax - especially in the private sector ranging from production or import of raw material to the final products, has made that this sector as a result to have the reduction in the number of employees or even if it does not reduce the number of workers then most workers' has faced and faces more problems and violations of their rights consistently.
- Another feature is the lack of harmonization of appropriate macroeconomic policy to ensure favourable conditions of labour market activity in national terms, which will create new work places but also to create continuity for current places of work.
- Schedules of lengthy labour, low wages, seasonal jobs cuts are the main factors leading to the deterioration physical and psychological of the population which faced daily worries, depression and illness on long-term consequences which are a cost separately for individual, family and society in general.
- Non application of educational reforms or lack of medium and long term strategies for vocational education which could prepare skilled and adequate staff for self-employment, especially in the agribusiness sector.
- From all those mentioned above we see that during the period 2002 to 2013 do not have any employment strategy with specific objectives and priorities which will enhance the motivation and expectation for the near future that could lower or at least taming unemployment in Kosovo.

Considering the specifics of Kosovo in terms of natural resources which present significant potential for satisfying economic development and simultaneously a favourable labour market, the use of agricultural land we see as a solution that would help on reducing unemployment. The territory of Kosovo is represented by 53% of agricultural land, 41% is forest land and 5.2 is the next area. So by using this fund land need great attention to the promotion of agriculture (agribusiness) and training as a self-employment opportunity.

### 4. CONSLUSION

Are strategic and concrete which have approximately followed the region although with different specifications:

- Creation of new jobs is one of the most serious challenges facing the economy of a country, However must make continuous efforts to achieve such a thing for this need a planned strategy of employment with targets and priorities;
- Improved performance of employment services network within the existing capacity;
- Human capital investment consistently is one of the priorities of the governing bodies;
- Improving and training lifelong;
- Drafting of programs for creation of new jobs and retaining existing ones;
- Creating a positive climate for business and investment, increase competition among SMEs in the local market initially and then at the regional and global, applying technology development and information;
- Reduction of administrative barriers and creating facilities for business;
- Bridging the throat of the informal sector.

By following these recommendations, the labour market could become more attractive and advantageous for all jobseekers and current employees that their energies would guide with high productivity at work.

It is characteristic that employment in the public sector in Kosovo is frozen until 2015 so that the main burden of absorbing army of unemployed no doubt falls to the private sector, because

spending budget framework 2013-2015 does not provide such a thing. To happen such a thing is necessary to create better opportunities for businesses in order to increase employment. Viewed in years to secondary and tertiary sectors have been declining in number of vacancies reported except to the primary sector, which has had especially increase for 2008 was 3% and 17% since 2009 even for the coming years trends have been very slow that will not give any hope for a near future that could create any positive hope in alleviating unemployment. By analysing all that was mentioned above about the labour market in Kosovo conclude that the high rate of unemployment is as a result of non-developed economy where largely non-utilization of available manpower remains.

Kosovo should create favourable policies to attract foreign capital in order to use the advantages that are offered especially in the aspect of the young people.

Strategic orientation of the Kosovar economy should be state policy of favouring the development of small and medium enterprises as generator of economic development on occasion will allow creation of new jobs, especially for young Kosovar.

Also the budget management and its control is one of the substantial elements regarding for creation of new jobs, especially in lowering the costs in the social safety net focusing only on those who really need.

Use of natural resources as significant potential in economic development, especially the fund of agricultural land is an important factor towards alleviating the level of unemployment as an acute illness in Kosovo that already absorbs the largest number of employees or better to say self-employed during these years.

Increasing a level of qualification for relevant professions is an important step, and a dominant role will play professional schools in preparing young people for certain areas. This happens in order to increase productivity as well as the self-initiative to open businesses and self-individual employment.

So, the whole process requires a commitment of all fundamental actors operating in Kosovo starting from government, business representatives, groups of interest, in order to draft appropriate strategies to ensure healthy economic growth.

## LITERATURE

1. Msc. Artan Haziri – Comparative analysis of labour market policies and characteristics of unemployment in Kosovo and Macedonia in 2009. Pristina
2. Stanley Fischer – Macroeconomy - the World Bank and Department of the Economy - Massachusetts Institute of Technology
3. Statistical Office of Kosovo, labour market statistics 2002,2003,2004,2005,2006,2007, 2008,2009,2010,2011, Pristina
4. MLSW - DLE of Kosovo 06/2009. Pristina
5. Report of performance, labour and employment 2010,2011,2012. Pristina
6. Labour market and unemployment-Riinvest institute 2003 Pristina
7. Ph.D. Petrit Pollozhani - Economic Structure and Employment as a representative of economic development (2006) Struga

## AN ECONOMETRIC ANALYSIS OF TOURISM DEMAND IN SELECTED COUNTRIES

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### **ABSTRACT**

*Tourism plays an important role in economic development and therefore many countries try to develop tourism policies to maximize benefits from this sector. In this vein, it is very important to empirically investigate the determinants of tourism demand for the policy makers both in public and private sectors. The aim of this study is to examine the factors that affect the demand for tourism in the most attractive first 10 countries for tourist and propose policy implications based upon the empirical findings. The study, by employing panel unit root, panel cointegration, panel error cointegration approach and by utilizing the data for the period 1995-2011, tries to determine whether income, price stability, supply capacity, exchange rate and political stability have any impacts on demand for tourism in the selected 10 countries. Econometric results obtained from panel cointegration analysis show that macroeconomic factors as such income, prices, supply capacity, exchange rate and political stability play statistically significant role in determining the demand for tourism in top 10 countries.*

**Keywords:** *Demand for Tourism, Tourism Sector, Panel Data, Cointegration, Determinants of tourism*

### **1. INTRODUCTION**

Tourism is a multi-dimensional issue and has impacts on economic, social, cultural and political issues in every society. There is a wide range of studies on this topic and researches on this subject generally focuses on the economic aspects of tourism. In this vein, tourism sector, one of the largest sectors in the world, plays an important role in every economy by increasing both private and public investment, obtaining foreign currency and easing the balance of payment issues, creating new employment opportunities, alleviating regional imbalances and generating income. Therefore, each country pays an important attention to this sector and tries to maximize the gains from it by all means. Additionally, tourism is interrelated with several subsectors and development of this sector, therefore, positively affects the whole society with the help of multiplier.

The aim of this paper is to empirically investigate the determinants of tourism demand for the selected ten countries, by employing modern econometric techniques and data for the period 1995-2011, on the top of list that attract most tourist in the world. Econometric results obtained from panel cointegration analysis show that macroeconomic factors as such income, prices, supply capacity, exchange rate and political stability play statistically significant role in determining the demand for tourism in top 10 countries.

### **2. INCREASING ROLE OF TOURISM IN THE WORLD**

Importance of tourism sector has been increasing over the years in the world economy. Table 1 presents the development in the world tourism sector and shows that number of tourist arrivals rapidly increased from 25.3 million in 1950 to 1.035 billion in 2012. Similarly, tourism income gone up to \$1.075 trillion in 2012 from \$2.1 billion in 1950. However, a detailed investigation

of Table 2 also shows that number of tourist arrivals and receipts from tourism started to fluctuate after 2000s, due to the terrorist attack of September 11 in the USA, Iraq war, SARS epidemic and global economic stagnation.

*Table 1. International Tourism Arrivals and Tourism Receipt*

Year	Tourist Arrivals (Million People)	Change (%)	Receipt (Billion \$)	Change (%)
1950	25.3	-	2.1	-
1960	69.3	173,9	6.8	223,8
1970	165.8	139,2	17.9	163,2
1980	286.5	73	105.4	588,8
1990	455.9	159,1	264.1	250,5
1991	461.1	1,1	277.9	5,2
1992	502.2	8,9	317.1	14,1
1993	515.3	2,6	322.9	1,8
1994	535.8	4	356	10,2
1995	550.4	2,7	404.6	13,6
1996	580.2	5,4	438.8	8,4
1997	601.5	3,7	442.9	0,9
1998	621.4	3,3	445.2	0,5
1999	643.3	3,5	455	2,2
2000	687.3	6,8	473.4	4
2001	684.1	-0,5	459.5	-2,9
2002	702.6	2,7	474.2	3,2
2003	691	-1,5	525	10,7
2004	763	10,7	622	18,4
2005	802	5.1	680	9.3
2006	847	5.6	745	9.5
2007	901	6.4	858	15.1
2008	919	2.0	941	10.1
2009	892	-2.9	852	-9.4
2010	949	6.4	930	8.7
2011	995	4.8	1.042	12
2012	1.035	4	1.075	3.1

Source: UNWTO (2013)

Distribution of tourists shows that each geographic region does not benefit evenly from tourism sector (Table 2). It is seen that shares of Europe, Asia-and Pacific, Americas, Middle East and Africa are %52, %23, %17, %3 and %3 respectively in 2012. Additionally while number of tourist arrivals between 1990 and 2012 increased from 252 million to 540 million in Europe, from 59 million to 236 million in Asia and Pacific, from 8 million to about 32 million in the Middle East and from about 10 million to 30 million in Africa. As far as growth rate is concerned, it is higher in developing countries and in particular share of Asia and pacific experienced a highest growth rate in tourist arrivals. To put it in prospect, According to the 2030 projections of UNWTO, it is considered that the share of Asian-Pacific countries will increase. Among the remarkable information taking place in the report, the view that the developing countries will have a higher share than the developed countries in the future. Table 3 presents the tourist arrivals for the most attractive countries in the world.

*Table 2. Regional Share of International Tourism in the World (2012)*

	International Tourist Arrivals by region of origin (Million)								Market Share(%) 2011	Change (%)		Average annual (million) 05–12
	1990	1995	2000	2005	2009	2010	2011	2012		11/10	12/11	
World	436	529	677	807	892	949	995	1.035	100	4,8	4,0	3,6
Europe	251.9	303.4	388.8	449.7	477.6	497.1	520.5	539.8	52,1	4,7	3,7	2,6
Asia and Pacific	58.7	86.4	114.2	153.2	181.0	206.4	222.5	236.4	22,8	7,8	6,3	6,4
Americas	99.3	108.5	130.8	136.5	147.3	156.3	164.2	171.5	16,6	5,1	4,4	3,3
Middle East	8.2	9.3	14.1	22.9	32.2	34.5	33.8	31.7	3,1	-2,1	-6,2	4,8
Africa	9.8	11.5	14.9	19.3	25.6	28.1	29.8	30.8	3,0	6,1	3,3	6,9
Origin not specified	7.9	10.3	14.0	25.4	28.2	26.5	24.1	25.0	2,4			
Same Region	350.3	423.4	532.4	630.7	688.0	728.3	769.3	799.8	77,3	5,6	4,0	3,5
Other Regions	77.6	95.7	130.3	151.0	175.6	194.2	201.6	210.4	20,3	3,8	4,4	4,9

Source: UNWTO (2013)

*Table 3. International Tourist Arrivals (2012)*

Rank		Million		Change (%)	
		2011	2012*	11/10	12*/11
1	France	81.6	83.0	5,0	1,8
2	USA	62.7	67.0	4,9	6,8
3	China	57.6	57.7	3,4	0,3
4	Spain	56.2	57.7	6,6	2,7
5	Italy	46.1	46.4	5,7	0,5
6	Turkey	34.7	35.7	10,5	3,0
7	Germany	28.4	30.4	5,5	7,3
8	UK	29.3	29.3	3,6	-0,1
9	Russia	22.7	25.7	11,9	13,4
10	Malaysia	24.7	25.0	0,6	1,3

Source: UNWTO (2013)

### 3. EXISTING LITERATURE

As far as existing literature is concerned, there are several researches that focus on the demand for tourism by using a variety of country and country groups and by employing different strategies. Table 4 classifies the existing literature by the author(s), sample, period, variables, model and methodology.

<i>Authors</i>	<i>Samples</i>	<i>Period</i>	<i>Independent variables</i>	<i>Dependent Variable</i>	<i>Research techniques and methods</i>
Eilat and Einav (2003)	All countries, High GNP Destinations, Low GNP Destinations	1985- 1998	Trade, Distance, GNP, Land, political stability, common border and same lang. dummy variables	destination cost/origin cost	Multinomial Logit Estimation
Martin, Morales and Scarpa (2004)	21 Latin American country	1985-1998	Growth of tourists per capita, Gross domestic investment (GDI), percentage of GDP, Public expenditure on education, percentage of GDP, political stability, dummy variables	Per capita Gross Domestic Production(PGDP)	Dynamic panel data analysis
Campos and Sequeira (2005)	509 observations	1980-1999	Tourist arrivals and tourism receipt PGDP-1, Secondary Male Enrolment, Investment-Output ratio, Government Consumption-Output ratio, Exports plus Imports to output ratio, Black Market Premium Tourist Arrivals as Population Proportion, Tourism receipts in % of Exports, Tourism receipts in % of GDP	PGDP Ratio	Static panel Data Analysis
Lee and Chang (2008)	23 OECD countries and 32 non-OECD countries	1990-2002	Tourist arrivals, real effective exchange rate, per capita tourist arrivals, per capita real tourism receipts	GDP	Panel unit root and co-integration analysis
Karem (2009)	20 countries	1995-2003	Real world income, CPI, crime rate political instability and fixed and mobile telecommunication services	Total tourist arrivals	Panel GMM
Allen and Yap (2009)	7 Australian states	1999 -2007	Domestic household income, tourism prices, transportation costs, the price of overseas holidays and dummy variables ( Bali bombings in 2005 and Sydney Olympic Games in 2000) and seasonality	Demand for domestic tourism	Static panel Data Analysis
Korkmaz et al. (2009)	10 countries that have most tourism expenditures in the world	1995-2007	Unemployment Rate, GDP, Gross Domestic saving Rate, inflation rate	Tourism Expenditure	panel data regressions
Görmüş and Göçer, (2010)	32 countries	2000 -2006	Real Income, Relative Prices and Competitive Prices ,distance, Accommodation Capacity and Marketing Expenditure, Real Exchange Rate, Population, Dummies	Tourist arrivals	Panel OLS and SUR
Saray and Karagöz (2010)	48 countries	1992-2007	Model I: GDP, Population, distance Model II: PGDP, Population, distance	Total tourist arrivals	Panel Gravity Model
Dritakis (2011)	7 Mediterranean countries	1980 - 2007	Per Capita Tourism Receipt, Per capita tourist Arrivals, Real Exchange Rate	Real PGDP	Panel FMOLS
Gallego (2011)	OECD countries	1980-2006	Total Trade, export and import	Model I: Tourist Arrivals, Model II: Tourist Departures	Panel FMOLS, DOLS, PMG, MG
Massidda and Etzo (2012)	20 destination in Italy	2004-2007	Previous year tourist Arrivals, population density, population density at destination, public expenditure for culture activities, distance, PGDP, CPI, index of endowment of touristic places, number of kilometers of highways, crime Rate, air pollution	Tourist Arrivals	Panel GMM
Chou (2013)	10 Transition economy	1988-2011.	inbound Tourism expenditure	RPGDP	Panel causality analysis
Che (2013)	14 Countries	1998 - 2011	CPI	Tourist arrivals	Panel threshold model
Šturlić and Štoković (2013)	4 tourism destination in Croatia	1998-2008	price per night in hotels sending country per capita GDP, per capita GDP, hostels quality, number of internet booking	Number of nights spent in accommodations	Panel GLS
Gholipour et. al (2014)	80 countries	1999-2011	disposable income, Exchange rate, index of air travel prices and cost, Personnel freedoms	Number of outbound travelers	Panel GMM

Table 4. A Literature Survey on the Demand for International Tourism

#### 4. DATA AND EMPIRICAL FRAMEWORK

Economic theory shows that macroeconomic factors plays an important role in demand for tourism. However the impacts of macroeconomic variables on the demand for tourism is an empirical issue. Empirical investigation will allow us to evaluate whether there are any differences on the determinants of demand for tourism in the countries or country groups.

Following the theoretical and empirical literature, the following model is utilized to determine whether the independent variables have any effects on the demand for tourism. The model is as follows in the implicit form:

$$TA = f(CPI, GDP, RDK, BN, PST) \quad (1)$$

Where the variables in Equation 1, their measurement and source are presented in Table 5.

Table 5. Data, Measurement and Sources

Variables	Explain of Variables	Source	Period
TA	Tourism Demand (Tourist Arrivals)	World Development Indicators (WDI) and United Nations World Tourism Organization (UNWTO)	1995–2011
CPI	Consumer Price Index	World Development Indicators (WDI)	1995–2011
GDP	Gross Domestic Product per capita	World Development Indicators (WDI)	1995–2011
RDK	Real Exchange Rate	World Development Indicators (WDI)	1995–2011
BN	Bed Numbers	United Nations World Tourism Organization (UNWTO)	1995–2011
PST	Political Instability Index	World Development Indicators (WDI)	1995–2011

Logarithmic form of Equation 1 can explicitly be rewritten in Equation 2 as follows:

$$\ln TA_{it} = \alpha_0 + \alpha_1 \ln CPI_{it} + \alpha_2 \ln GDP_{it} + \alpha_3 \ln RDK_{it} + \alpha_4 \ln BN_{it} + \alpha_5 PST_{it} + \varepsilon_{it} \quad (2)$$

where  $i = 1, \dots, N$  and  $t = 1, \dots, T$  represents the dimension time.

The expected effects of independent variables taking place in the Equation (2) can be expressed as follows:

- $\alpha_1 > 0$ : The increase at general price level is expected to reduce tourism demand (TA) (Eita et al., 2011; Proenca and Soukiazis, 2005; Ibrahim, 2011; Surugiu Leitão, 2011).
- $\alpha_2 > 0$ : An increase occurring in income (GDP) has a positive effect of tourism demand (TA) (Garin-munoz and Montero-martin, 2007; Aslan, Kaplan and Kula, 2008; Walle, 2010).
- $\alpha_3 > 0$ : The increase in real exchange rate (RDK) will reduce tourism demand. Since tourism demand expresses that national currency gains value compared to foreign currencies, it is expected that it negatively affects tourism demand (Maloney and Rojas, 2013; Webb and Chotithamwattana, 2013).
- $\alpha_4 > 0$ : It is expected that an increase in bed number (supply of touristic goods and services) lead the amount of goods and service presented to increase, thus, product diversity to increase, and totally, tourism demand to rise. The sign of coefficient is expected to be positive directional (Proenca and Soukiazis, 2005; Aslan, Kaplan and Kula, 2008).
- $\alpha_5 > 0$ : The rise in political stability index (PST) is expected to increase tourism demand i.e. to reveal a positive effect (Naude and Saayman, 2005; Webb and Chotithamwattana, 2013).



In the empirical analysis, annual data for the period 1995-2011 are used from the selected ten countries which attract most tourist in the world. The countries are included in the analysis as presented in Table 6:

*Table 6. Sample Countries*

Countries			
1	France	6	Turkey
2	USA	7	Germany
3	China	8	UK
4	Spain	9	Russia
5	Italy	10	Malaysia

The estimators used in the study and codes belonging to the estimators were run, using the econometrical and statistical software E-views 8.0 and Gauss 10.0

## 5. EMPIRICAL FINDINGS

### 5.1. Results of Panel Unit Root Test

The first step of panel cointegration analysis is to investigate the stationarity properties and to determine the order of integration of the variables. To this end, we utilize three panel unit root tests developed by Levin et al. (2002, henceforth LLC), Im et al. (2003, henceforth IPS), and Breitung (2000). The former two are widely used panel unit root analysis in the literature on panel cointegration. The null hypothesis of the tests is a unit root in the panel. However, while LLC (2002) and Breitung (2000) assume that the cross-sectional units share a common unit root process, IPS (2003) assumes that the cross-sectional units have individual unit root process.

Unit root tests present important information in terms of decomposing and determining the factors determining tourism demand. Hence, before beginning cointegration analysis, the findings to be able to be obtained from stationarity analysis and their policy applications were dealt with. Results for the panel unit root tests are illustrated in Table 7. At first glance, it is not clear that the panel variables are stationary at a 99% confidence level (Erdem et al, 2010: 539).

*Table 1. Panel Unit Root*

		Level		Constant +Trend		First Difference		Constant +Trend	
		Statistic	P-value	Statistic	P-value	Statistic	P-value	Statistic	P-value
lnBN	LLC	-1.58	0.056	-1.10	0.133	-6.41	0.000	-7.78	0.000
	IPS	1.11	0.866	-0.81	0.207	-5.25	0.000	-6.26	0.000
	Hadri	7.32	0.000	6.49	0.000	1.20	0.113	0.69	0.243
	CADF	-2.13		-2.45**		-2.45**		-2.65**	
lnCPI	LLC	0.15	0.561	-1.16	0.122	-11.84	0.000	-8.75	0.000
	IPS	-1.12	0.130	-1.02	0.153	-9.93	0.000	-7.10	0.000
	Hadri	3.05	0.001	9.26	0.000	0.83	0.200	-0.17	0.958
	CADF	-2.02		-2.59		-3.30***		-3.44***	
lnGDP	LLC	-0.92	0.179	-0.22	0.410	-3.88	0.000	-4.67	0.000
	IPS	0.49	0.69	2.93	0.998	-3.12	0.000	-3.42	0.000
	Hadri	6.88	0.000	5.89	0.000	1.95	0.025	1.34	0.090
	CADF	-2.67***		-2.33		-1.57		-4.36***	
lnPST	LLC	-0.84	0.198	-1.30	0.096	-7.34	0.000	-9.08	0.000
	IPS	-1.05	0.146	-3.16	0.000	-8.67	0.000	-7.78	0.000
	Hadri	3.34	0.000	6.88	0.000	-0.12	0.547	0.720	0.235
	CADF	-1.261		-1.40		-2.71***		-3.135**	
lnRDK	LLC	-2.11	0.017	-2.69	0.003	-8.21	0.000	-8.49	0.000
	IPS	-1.18	0.117	-0.62	0.266	-6.29	0.000	-5.59	0.000
	Hadri	4.04	0.000	4.51	0.000	1.17	0.120	0.15	0.440
	CADF	-5.84***		-3.74***		-3.38***		-5.72***	
lnTA	LLC	-2.58	0.004	-5.30	0.000	-8.61	0.000	-6.96	0.000
	IPS	-0.03	0.485	-2.67	0.003	-7.43	0.000	-5.42	0.000

Hadri	7.49	0.000	4.06	0.000	0.62	0.267	0.78	0.216
CADF	-2.12		-1.646		-2.25*		-2.29*	

Note: The critical values of CADF statistical values were accepted as -2,66 for constant, -3.24 for constant and trend at 1%; -2.37 for constant, -2,93 for constant and trend at 5%; and -2,22 for constant, -2.76 for constant and trend at 10 %

The tests of LLC (Levin, Lin and Chu 2002), IPS (Im, Pesaran and Shin (2003), Hadri (2000) and Pesaran (2007) CADF (Cross-Sectional Augmented Dickey-Fuller) carried out show that tourism demand (lnTA) is not stable at the level, however, when its difference is taken, it is stable. Thus, the fluctuations the shocks occurring in the factors determining the tourism demand generated on the tourism demand are not temporary and exhibit a permanent feature.

Unit root tests shows that tourism demand (lnTA) is stable in its first difference. The findings obtained reveal that some part of the effects of the shocks occurring in the tourism demand in the first countries attracting tourist in the most number in the world tourism sector was eliminated by market mechanism in the short term, while some part were not eliminated and these shocks were permanent. However, when the first differences of series are taken, it is seen that it became stable and, in the long term, this problem disappeared

Stationarity analysis, in these countries, general price level (lnCPI) also include unit root. However, in the first difference of series, unit root is not met.

The results of stationarity analysis show that the exchange rate (lnRDK) includes the feature of unit root. That is in the first 10 countries attracting tourist in the most number in the world, it reveals that there are shocks in the exchange rate. However, the results show that this problem is also short termed and, in the long term, is corrected That is, series does not contain unit roots its first differences.

Panel unit root tests show a full consistency about that the level values of all variables are not stable. When their first differences are taken, it is concluded that it is stable. Thus, the condition that series should be first order integrated ((I(1))), one of the main assumptions of the tests of Pedroni (1999),and Westerlund ve Edgerton (2007), are satisfied.

## 5.2. RESULTS OF PANEL COINTEGRATION TEST

Table 8. Panel Cointegration Test

		Constant		Constant trend	
		Statistic	P-value	Statistic	P-value
<i>Pedroni (1999)</i>	Panel-v	-0.481416	0.6849	-1.239184	
	Panel-rho	1.605899	0.9459	2.991036	0.9986
	Panel-pp	-3.908882	0.0000***	-2.455883	0.0070***
	Panel-adf	-3.839977	0.0001***	-2.707001	0.0034***
	Group-rho	3.359107	0.9996	4.485265	1.0000
	Group-pp	-4.973372	0.0000***	-10.08239	0.0000***
	Group -adf	-4.673525	0.8924	-3.167950	0.0008***
<i>Westerlund and Edgerton (2007)</i>					
	$LM_N^+$	31.009	0.375 <sup>b</sup>	50.678	0.620 <sup>b</sup>

In Pedroni (1999) test , lagging number 2, probability values reported for Westerlund and Edgerton (2007) tests were obtained from 1000 repeated bootstrap distribution.

h: expresses the values of “bootstrap distribution probability”.

Table 8 shows the results of panel cointegration test. Most of Pedroni tests taking place in Table 8 show that there is a cointegration relationship for the group of the first 10 countries attracting the most number of tourists. These results do not take into consideration the dependency between horizontal cross-sections. The test of horizontal cross-sectional dependency test (CD

test), developed by Pesaran (2004) shows that there is no horizontal cross-sectional dependency in the first ten countries attracting the most number of tourist (See, Table 9).

In terms of reliability of findings in the direction of presence of cointegration relationship, obtained from Pedroni tests, panel cointegration tests, developed by Westerlund and Edgerton (2007), were carried out and the results were reported in Table 8. As suggested by Westerlund, in order to take into consideration horizontal cross-sectional dependency, the probability values, obtained from “bootstrap” distribution were used and shown in Table 8. According to this, for panel test discussed, it is reached conclusion of the null hypothesis that “there is cointegration” is accepted.

The results belonging to panel cointegration statistics of the tests of Pedroni (1999) and Westerlund and Edgerton (2007), confirm each other. While, Pedroni (1999) null hypothesis is in the form of “there is no cointegration”, in the test of Westerlund and Edgerton (2007), null hypothesis were applied in the form of “there is cointegration”. So, in the first 10 countries attracting the most number of tourists, it appears that between the number of tourist expressing tourism demand and explanatory variables, there is long term relationships

### 5.3. Prediction Methods of Panel-Cointegration Relationship

Table 2. Prediction of Panel-Cointegration Relationship

	DOLS		FMOLS		2- Step	
	Coefficient	t-stat.	Coefficient	t-stat.	Coefficient	t-stat.
lnCPI	0.004506	0.236440	-0.017996	-2.072315**	-0.131	-5.038***
lnGDP	1.112844	7.975482***	1.098859	12.58285***	0.189	1.537
lnRDK	-0.122660	-0.874944	-0.173469	-2.258314**	-0.359	-2.805***
lnBN	0.514515	4.714895***	0.524336	6.024861***	1.177	10.060***
lnPST	0.064701	1.679663*	0.066706	2.672991***	0.083	1.361
<i>CD Test</i>						
<i>Statistic</i>	-0.855					
<i>P-value</i>	0.392					

In DOLS prediction, processor and lagging numbers were determined according to Schwarz information criteria and, in FMOLS and 2-staged predictions, lagging number was taken as 2. \*\*\*, \*\*, \* represents the statistical significance at the levels of 1%, 5%, and 10%

According to the findings obtained, the coefficients and t-statistics values show the accuracy of the model. According to 3 estimators (DOLS, FMOLS and 2-staged predictor), the results show consistency to each other. When the findings, obtained in terms of both the direction of coefficients and their significance, are evaluated, also in three models, the values acts in harmony with each other. All explanatory variables used in model are important and significant in terms of model according to t-statistics values.

When explanatory variables are individually evaluated, it is seen that *lnGDP* and *lnBN*, namely gross domestic product per capita, and bed capacity in quality of an indicator of tourism supply, stand out as a main explanatory variable.

In compliance with theoretical framework, gross domestic product per capita, as expected, takes place the most important determinants of tourism demand. When it is evaluated in terms of magnificence of coefficient, it has a quite strong effect. An increase of 1% occurring in the incomes of individuals increases the tourism demand about 1.11%. According to the results of FMOLS predictor, at the significance level of 1%, an increase of 1% raises tourism demand by 1.09%.

According to the results of DOLS, an increase of 1 % occurring in capacity of touristic supply, the second explanatory variable, as expected from theory, leads to an increase in the rate of

0.51%. According to the coefficients of FMOLS predictor, a variation of 1% occurring this variable included in the model causes an increase of 0.52% in the tourism demand. The results of 2-staged predictor say that as a result of increase of 1% in the capability of touristic supply, an increase of 1.17% will occur in the tourism demand.

In terms of its indicating the price level of a country, the explanatory variable of price level (in CPI) we include in the model turned out insignificant according to the results of DOLLS predictor, but according to FMOLS and two staged estimators, it has a significant effect and supports the theory. If it is necessary to interpret the coefficient in terms of model, in the first 10 countries attracting the most number of tourist, a 1% increase in general price level (lnCPI) cause a decrease of 0.07% on tourism demand and 2-staged predictor shows that percentage increase occurring in general price level will affect tourism demand more strongly and will cause a decrease of 0.13%.

The tests applied show that the relationship real exchange rate (lnRDK) and tourism demand is significant. These results show compliance with theory. 1% increase occurring in real exchange rate meaning that national money revalues reduces the tourism demand in the rates of 0.12%, 0.17%, and 0.35% according to the results of DOLS, FMOLS, and 2-staged predictor results, respectively.

According to the results of DOLLS predictor, the variable of political stability (lnPST) is a statistically significant variable at the level of 10 % and increase of 1% occurring in the variable causes an increase of 0.06% in tourism demand. According to FMOLS results, an increase of 1% occurring in political stability (lnPST), whose explanatory power is quite high at the significance level of 1% causes an increase of 0.06% in tourism demand. According to the result of 2-staged predictor, although it is statistically insignificant, it is compatible with theory as the sign of coefficient and provides a positive contribution to the model.

#### **5.4. Empirical findings**

World tourism tried an expansion and diversification showing continuity in tourism in the past century and became the largest and the most growing sector of the world. Except for the traditional favorites of Europe and North America, a number of destination has emerged. In world tourism, each new destination opened, and investments made on tourism, through their main effects on socioeconomic developments, leads important changes in trade incomes, possibility of entrepreneurship and job, and development of infrastructure.

In this study, the determinants of tourism demand, in the sample of the first ten countries attracting the most number of tourists in the world, were analyzed and the effect levels of the variables were studied. An answer were sought to the question that "What are the determinants of tourism demand of the first ten countries attracting the most number of tourist in the world".

In order to test these hypotheses, determined in the study, model was tested by the method of panel data analysis by means of datasets covering 1995-2011

The findings obtained regarding the model, can be summarized as follows:

According to the results of unit root test, in the first ten countries attracting the most number of tourists in world tourism, fluctuations (shocks) occur in the prices of touristic goods and services. It is understood that in the short term, shocks are permanent, however, in the long term, these fluctuations reach equilibrium spontaneously.

In similar way, in the first 10 counties attracting the most number of tourists in world tourism, it reveals that some part of the effects of shocks occurring in tourism demand is eliminated by market mechanism, while some part cannot be eliminated.

Cointegration tests, carried out for model, reveal that there is a cointegration relationship between variables. The coefficients of all determinatives (inflation, income per capita, exchange rate, supply of touristic goods and services, and political stability) used in the study are statistically significant and their signs are like expected in the theory.

It is understood that supply of touristic goods and service have an important effect in the model. It is seen that the increase in the supply capabilities of the courtiers under consideration is important and that the consumers are also highly sensitive to the variations in the supply.

In similar way, according to the results of analysis, it is concluded that the income and exchange rate have an important effect on the demand function. In the demand analyses by using the method of panel -data analysis, it was identified that the variable of exchange rate and income has an important effect in the growth of tourism demand.

In the model, tested in the study, the fluctuations in the prices stand out as a risky element in terms of demand. It is seen that tourism demand, both in the first 10 countries attracting the most number of tourists in the world and Turkey, is largely accounted for by the variables of income, exchange rate, inflation, and capability of touristic supply. That is, tourism demand is also accounted for by the macro variables. These findings reveal that in tourism demand, macroeconomic variables are so much important

## 6. CONCLUSION

It is possible to develop the various policy recommendations based the findings obtained from the empirical part of the study. Firstly, for being able to be impeded shocks in the short term, and provided stability in the prices of the touristic goods and services, the policies providing the economic and financial stability has a great importance.

At this point, for the elimination of fluctuations in the demand, it is necessary for public and private sector to jointly apply the shock preventive policies

Secondly, in the model, it is seen that the supply capabilities of the countries under consideration are quite high and that the consumers are also sensitive to the variations occurring in the supply. With moving from these results, it can be said that those making policy toward increasing tourism demand should implement policies improving the services of infrastructure and that private sector also should improve the services of superstructure.

When the results and the places of counties under consideration in the world economy are taken into consideration, it is possible to say that the growth trend in world economy is in parallelism with the growth trend in tourism demand and that correlation coefficient between them is high. In this case, in the same way with 2008 crisis, it is clear that a shock in global scale to be experienced in the world economy will negatively affect tourism demand Therefore, the policies toward stability in the global meaning will indirectly make tourism demand stable.

Tourism sector has had an important place in economy. Because of this, the fluctuations experienced in the sector result in the serious effects on economy in the short and long term. In the light of the results above, the investments toward tourism activities, in which the price flexibility of demand and income flexibility are low, should be made by the public and private sector. With making these investments in the areas such as sports, congress thermal, health, culture, hunting, and golf tourism, whose the price and income flexibilities are lower, economy, being affected less from the possible shocks, will become stable. In addition, touristic activities will cover 12 months.

Finally, in terms of its being guide for the next studies, two suggestions can be presented: Firstly, this study only concentrated on some of macro determinatives of tourism demand. Besides this, also including some macro variables in the model, the scope of study can be expanded. The part of literature review is a guide in this meaning. Secondly, in the study, only determinatives of demand are tested and any projection about future was not given place. At this point, in the light of findings, a demand projection can be made.

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## LITERATURE

1. ALLEN, D. and YAP, G. (2009). Modeling Australian domestic tourism demand: A panel data approach, 8th World IMACS/MODSIM Congress, Cairns, Australia 13-17 July, <http://mssanz.org.au/modsim09>, (19.07.2013).
2. BAI, J. ve KAO, C. (2006). "On the Estimation and Inference of a Panel cointegration Method with Cross-sectional Dependence" In: Baltagi B.H. (Ed.), *Panel Data Econometrics: Theoretical Contributions and Empirical Applications*. Elsevier Science & Technology.
3. BREITUNG, J. (2005). "A Parametric Approach to the Estimation of Cointegration Vectors in Panel Data", *Econometric Reviews*, 24(2),151-173.
4. CAMPOS, C. and SEQUEIRA, T.N. (2005). Tourism and Economic Growth: A Panel Data Approach. *International Conference: Theoretical Advances in Tourism Economics*, University of Évora, Portugal. 18-19 March 2005.
5. CHE, C. M. (2013). Panel threshold analysis of Taiwan's outbound visitors, *Economic Modelling* 33, 787–793.
6. CHOU, M. C. (2013). Does tourism development promote economic growth in transition countries? A panel data analysis, *Economic Modelling* 33, 226–232.
7. DRISTAKIS, N. (2004). Tourism as a Long-Run Economic Growth Factor: An Empirical Investigation for Greece Using Causality Analysis, *Tourism Economics*,10(3), 305–316.
8. EILAT, Y. and EINAV, L. (2004). Determinants of International Tourism: A Tree-Dimensional Panel Data Analysis, *Applied Economics*, 36,1315-1327.
9. ERDEM, E., NAZLIOGLU, S., ERDEM, C. (2010) "Exchange Rate Uncertainty and Agricultural Trade: Panel Cointegration Analysis for Turkey". *Agricultural Economics* 41(6): 537-543.
10. GALLEGO, M. S.,LEDESMA, F. and PÉREZ-RODRÍGUEZ J. V. (2011). Tourism and trade in OECD countries. A dynamic heterogeneous panel data analysis, *Empirical Economics*, 41(2), 533-554.
11. GHOLIPOUR, H. F., TAJADDINI, R. and AL-MULALI, U. (2014). Does personal freedom influence outbound tourism?, *Tourism Management* 41, 19-25.
12. GÖRMÜŞ, Ş. and GÖÇER, İ. (2010). The Socio-Economic Determinant of Tourism Demand in Turkey: A Panel Data Approach, *International Research Journal of Finance and Economics*, 55, <http://www.eurojournals.com/finance.htm>, (04.01.2013).
13. HADRI, K. (2000). Testing for Stationarity in Heterogeneous Panels, *Econometrics Journal*, 3,148-161.

14. IM, K. S., PESARAN, M. H. and SHIN, Y. (2003). Testing for Unit Roots in Heterogeneous Panels, *Journal of Econometrics*, 115, (1), 53-74.
15. KORKMAZ, T. UYGURTÜRK, H. ve DARICI, H. K. (2009). Küresel Ekonomik Krizin Turizm Sektörüne Etkisi: Panel Veri Analizi, *Ticaret ve Turizm Eğitim Fakültesi Dergisi*, 2009(2).
16. LEE, C.C and CHANG, C.P. (2008). Tourism Development and Economic Growth: A Closer Look at Panels, *Tourism Management*, 29, 180–192.
17. LEVİN, A., LİN, C.-F. and CHU, J. (2002). Unit Root Tests in Panel Data: Asymptotic and Finite Sample Properties, *Journal of Econometrics*, 108(1), 1-24.
18. MARTÍN, J.L., MORALES, N.M. ve SCARPA, R. (2004). Tourism and Economic Growth in Latin American Countries: A Panel Data Approach, <http://www.feem.it/Feem/Pub/Publications/WPapers/default.htm> (27.04.2005).
19. MASSÍDDA, C. ETZO, I. (2012). The determinants of Italian domestic tourism: A panel data analysis, *Tourism Management*, 33, 603-610.
20. PEDRONI, P. (1999). Critical Values for Cointegrating Tests in Heterogeneous Panels with Multiple Regressors, *Oxford Bulletin of Economics and Statistics*, 61(1), 653-570.
21. PESARAN, M. H. (2004). General Diagnostic Tests for Cross Section Dependence in Panels, *Cambridge Working Papers in Economics*, No 435, University of Cambridge.
22. PESARAN, M. H. (2007). A Simple Panel Unit Root Test in the Presence of Cross Section Dependence, *Journal of Applied Econometrics*, 22 (2), 265-312.
23. SARAY, O. ve KARAGÖZ, K. (2010). Determinants of Tourist Inflows in Turkey: Evidence From Panel Gravity Model, *ZKÜ Sosyal Bilimler Dergisi*, 6(11), 33–46.
24. ŠKUFLIĆ, L. ve ŠTOKOVIĆ, I. (2013). Demand Function for Croatian Tourist Product: A Panel Data Approach, *Modern Economy*, 2, 49-53.
25. UNWTO, (United Nation World Tourism Organization) 2010, *Tourism Highlights*, Madrid, Spain.
26. UNWTO, (United Nation World Tourism Organization) Tourism Highlights, 2013, [http://dtxqtq4w60xqpw.cloudfront.net/sites/all/files/pdf/unwto\\_highlights13\\_en\\_lr\\_0.pdf](http://dtxqtq4w60xqpw.cloudfront.net/sites/all/files/pdf/unwto_highlights13_en_lr_0.pdf), (15.08.2013).
27. UNWTO, (United Nation World Tourism Organization) Tourism Highlights, 2013, [http://dtxqtq4w60xqpw.cloudfront.net/sites/all/files/pdf/unwto\\_highlights13\\_en\\_lr\\_0.pdf](http://dtxqtq4w60xqpw.cloudfront.net/sites/all/files/pdf/unwto_highlights13_en_lr_0.pdf), (15.08.2013).
28. UNWTO, (United Nation World Tourism Organization) Tourism Towards 2030, 2011, [media.unwto.org/.../pdf/unwto\\_2030\\_ga\\_2011.pdf](http://media.unwto.org/.../pdf/unwto_2030_ga_2011.pdf), (15.08.2013).
29. UNWTO, (United Nation World Tourism Organization) Tourism Towards 2030, 2011, [media.unwto.org/.../pdf/unwto\\_2030\\_ga\\_2011.pdf](http://media.unwto.org/.../pdf/unwto_2030_ga_2011.pdf), (15.08.2013).
30. WESTERLUND, J., and EDGERTON, D. L. (2007). A Panel Bootstrap Cointegration Test, *Economics Letters*, 97, 185-190.

## STRATEGIES FOR DEVELOPMENT OF RURAL REGIONS IN DEVELOPING COUNTRIES

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### **ABSTRACT**

*Globally rural regions have been placed high on the developmental agenda of developing countries but no universally accepted definition of rural development exists. Rural development is defined as a developmental process which should lead to sustainable improvement of the quality of life of a rural community, including the poor. Rural regions are in dire need of revitalization. A paradigm shift is needed to focus more on rural regions due to over population and congestion in urban areas, technical development which leads to “space shrinking”, growing pressure of food security and a need for a sense of community and belonging. Since 2011, rural development has been prioritized as part of government policy in South Africa, after it has been neglected for more than two decades. In this article, rural development in a developing country, namely South Africa is analysed by looking at current policy and a rural development process is formulated known as the “Feza Isimangaliso” model. A number of best practice rural development strategies are also listed as solutions for rural development in developing countries including the building of governance capacity, support for the agricultural sector, maintenance and extension of infrastructure and other strategies.*

**Keywords:** *Local economic development (LED), Local government, Revitalisation, Rural development, South Africa, Strategies,*

### **1. INTRODUCTION**

This study seeks to explore possible solutions that could allow for the revitalisation and development of rural areas in developing countries, with a focus on South Africa. Rural South Africa has deteriorated consistently over the last few decades. The main reasons for this phenomenon are urbanisation and urban focused development policies. Rural areas are competing with urban areas, which have comparative and competitive advantages, and are identified globally as “*engines of growth*” due to skewed resource allocation (Duranton, 2008). Turn-around strategies are required to ensure that rural areas provide economic and social opportunities for local communities (DRDLR, 2010a).

Globally, as many as 1.4 billion people live in extreme poverty on less than \$2.00 per day and more than two-thirds live in rural localities in developing countries despite large-scale urbanisation (IFAD, 2011). In South Africa, 43 percent of the population is regarded as rural and 57 percent as urbanised, while the average rural population for Africa is approximately 60 percent, and for developed countries the level of urbanisation is approximately 80 percent (Nationmaster, 2011). Approximately 70 percent of the poor population in South Africa live in rural areas (Mokopanele, 2006; Hemson, 2004). Since 2011, the two main priorities of the South African government are job creation and rural development (Zuma, 2011). In October 2011, the National Planning Commission (NPC) released the National Development Plan (NDP), which lists the main priorities that are linked to national priorities (The Presidency, 2011). In collaboration with the NDP, the Comprehensive Rural Development Programme



(CRDP) was formulated and released in 2009 as a strategy focused on rural development (DRDLR, 2010b).

Rural revitalisation and development is a complicated process, and an integrated and comprehensive process is required for success (OECD, 2007). According to the DRDLR (2010a), the situation in rural South Africa is dire and complicated and intensified efforts of rural revitalisation are required to turn this situation around.

## **2. LITERATURE REVIEW**

There is no universally accepted definition of rural development. According to the World Bank (1997) rural development is “a process leading to sustainable improvement in the quality of life of rural people, especially the poor.” According to Anriquez and Stamoulis (2007), rural development is development that benefits the rural population and leads to the sustained improvement of the standards of living. Rural development can make a powerful contribution to the four critical goals of poverty reduction, namely wider shared growth and development within a specific rural region; access to basic needs; food security improvement; and sustainable natural resource management. A successful rural development strategy should make people less poor, rather than comfortable in their poverty. Rural development aims at improving the countryside or peripheral areas, with a mostly agrarian character (The Presidency, 2000).

According to Kenyon (2008), rural areas require revitalisation. He defined rural revitalization as, “a process which seeks to reverse rural decline, to develop a more resilient, sustainable and diversified local economy, and to enhance the quality of life of rural communities.” Furthermore, revitalisation needs to focus on the creation and stimulation of opportunities that will generate income and jobs, while preserving and enhancing the unique dynamics and features that make rural life special. Kenyon (2008) states that the positive outcomes sought by rural revitalisation include aspects such as stabilising and increasing the local population, diversifying the economic and employment base, maintaining an acceptable level of service, and preserving special rural attractions.

According to Wilkinson (1986), rural areas have three main problems, namely, the lack of social and community facilities, they appear to be out of fashion, and there is a lack of efficient policies and strategies to encourage rural development. Wilkinson provides some solutions to the phenomenon of rural revitalisation, namely the creation of jobs and generation of income, quality services and infrastructure, the reduction of inequality within the local community, and informed and committed local leaders. Wilkinson (1986) further states that, over the last few years, rural localities have become more popular due to over-congestion in cities, the move away from manufacturing to service industry, and the possibility of local solidarity in a rural community.

According to the OECD (2006a), “Rural areas face several new opportunities and challenges which call for appropriate rural development policies and a more efficient use of scarce resources.” Definitions of rural areas include that they are sparsely populated, possess limited educational and other community services, are areas where people farm or depend on natural resources, land is cheap, and transport costs are high (Heimann, 2010; Buxton, 1976; Duxbury, Campbell & Keurvorst, 2009; and Ashley & Maxwell, 2001). Characteristics of the rural poor include a lack basic needs, inability to improved their quality of life due to social exclusion and poor governance, limited land ownership or access to capital and employment, stagnating economy, underdevelopment of agriculture, lack of quality services and poor health conditions (Kakumba & Nsingo, 2008; Djukanovic & Mach, 1975).

Heimann (2010) lists the following rural challenges in South Africa namely, the underutilisation and sustainable use of local natural resources; poor access to socio-economic facilities, public services, infrastructure and other essential services; the low levels of skills;

unresolved land reform and land ownership issues; and the unexploited opportunities in labour intensive industries such as agriculture, tourism, mining and manufacturing. According to Bester (1994), South African rural areas are characterised by traditional agricultural processes, low income families, lack of finances, a lack of technical skills, and a high percentage of poor people, largely black.

Effective institutions could assist in creating an enabling economic environment in the rural and urban areas of a rural region. Improved institutionalisation can be achieved by means of inter-sectoral communication, strengthening local government, high levels of community participation, improved links between communities and politicians and partnership development (Davis, 2004). According to De Satge (2010), key issues for successful rural development include the involvement of local communities in the planning and implementation process, understanding local gaps in livelihoods, provision of basic needs, risks and vulnerability. Possible rural planning proposals for sustainable livelihoods could include the promotion of people-focused and poverty-based planning, expansion of local capacity for local economic development (LED), and conducting poverty audits. The development of strong communication channels between officials, councillors, community development workers (CDWs) and the public (ward committees) is also of importance (IIED, 2000). Delius and Schirmer (2001) list some possible solutions to rural development in South Africa namely: the capacity of the state must be maximised within an integrated approach; a change in the structural position of rural people by government is needed, such as access to economic opportunities and infrastructure development; land reform and agricultural development policy needs to be implemented more effectively; capacity of provincial and local government officials is very low and needs improvement; and alienation of farm land is a slow and expensive process requiring improvement. Such policy should totally transform the rural crises.

Rural development also has a strong social component. Netshitenzhe (2011) listed government interventions to address rural poverty, which included social grants, free basic services, housing, skills training, wage subsidies, public employment programmes, support for micro enterprises and entrepreneurs, and full time employment opportunities. The United Nation Development Programme (UNDP, 2012) defines the “rural triple wins model” as consisting of three components, namely economic development, social development and sustainable development. The aim is to include all three components in any rural development strategy and project to allow for inclusive growth, with jobs resulting in improved quality of life of rural communities and support for the green economy.

### **3. SOUTH AFRICAN RURAL DEVELOPMENT OVERVIEW**

Rural regions and towns in South Africa are characterised by high levels of unemployment, the under-utilisation of local resources, a decrease in agricultural activities, lack of linkages and transport routes, decay in maintenance of infrastructure, lack of community facilities, inability to generate a sustainable income base, and a lack of spatial and land use planning. Although rural towns are seen as potential growth points and service centres for rural development, the perception is that rural areas and rural towns have been neglected when compared with urban and metropolitan areas in South Africa. Rural towns are struggling to provide the basic level of service delivery required, and there are limited efforts to provide an enabling local economic development and business environment by local government (Meyer, 2013). In the past, rural development efforts have been poorly coordinated between the different spheres of government and implementation occurred in an ad hoc manner (DRDLR, 2010a).

With the repeal of all apartheid legislation from 1994 to 1996, the focus of the new government was to improve the quality of life of the disadvantaged rural poor, introducing a

number of rural development initiatives. The Reconstruction and Development Programme (RDP) was released in 1994 to actively address the imbalances created by the apartheid era, with one of the key components being rural development (ANC, 1994). The RDP was based on five pillars, namely to provide in the basic needs of people, building local economies, development of infrastructure, promoting peace and stability, and promotion of human resource development. The programme failed due to uncoordinated implementation and duplication by government agencies (DRDLR, 2010a).

The Integrated Sustainable Rural Development Strategy (ISDRS) of 2000 (The Presidency, 2000) was introduced to address the uncoordinated efforts of the RDP. The ISDRS had a rural development vision based on the creation of stable rural communities with viable institutions, sustainable economies, access to social amenities, and the ability to attract and retain skilled people to ensure rural growth and development. The idea was to have successful rural development by means of participatory and decentralised planning and implementation. The need for a spatial plan to guide the national investment and development programmes led to the formulation of the National Spatial Development Perspective (NSDP). Introduced in 2003, the NSDP aimed to address the spatial and economic imbalances of apartheid policies. Other important issues contained in the NSDP include, to provide a spatial framework of the national space economy by indicating areas of severe need and those with development potential, to act as a national guideline for sound spatial principles, to act as a spatial development vision in line with the Development Facilitation Act (DFA), and to identify key areas for infrastructure investment (DRDLR, 2010a; The Presidency, 2003).

The National Cabinet approved the Comprehensive Rural Development Strategy (CRDP) in August 2009. This is the latest rural development policy, different from previous plans in that it is a pro-active, participatory and community-based planning approach, rather than an interventionist approach. The vision is to create vibrant, equitable and sustainable rural communities. The CRDP intends to reduce poverty, malnutrition, unemployment and lack of infrastructure capacity in rural South Africa. The CRDP is based on three pillars, namely agrarian transformation, strengthening of rural livelihoods and land reform. The goals include accelerated distribution of the country's agricultural land, creation of rural business opportunities, and expanding opportunities for women, youth, disabled and the aged. The concept is to allow rural people to take control of their own destiny and to adapt their indigenous knowledge to their advantage. Priorities of the CRDP include a review of the land reform process, review of the rural land acquisition models, and increase in the pace of settling outstanding land restitution claims. The CRDP process has three phases, meeting the basic needs of rural communities, large scale infrastructure development in rural areas, and the emergence of small, micro and medium enterprises (SMME) development in rural industries and village markets (DRDLR, 2010a).

More than thirteen national government departments are involved in rural development with limited coordination. National government needs to consider rural development and LED as significant goals to achieve, and re-prioritisation is needed. The Department of Rural Development and Land Reform (DRDLR), Department of Trade and Industry (DTI) have made some effort to facilitate and co-ordinate rural and LED implementation. Improved inter-departmental and cross-sector collaboration is required at an accelerated pace, while national and local capacity needs to be increased, especially in rural areas (Rogerson, 2009).

#### **4. A RURAL DEVELOPMENT MODEL**

A number of attempts have been made regarding rural development and local economic development (LED) models in order to develop, redevelop or revitalize rural areas. Table 1 is a summary of some of the main models available regarding rural development processes within the literature.

**Table 1:** Summary of the main rural development/LED models

ORGANISATION	MODEL/PROCESS
DPLG: LED resource book for municipal councillors and officials (DPLG, 2003).	No specific step-by-step process.
The Presidency: Towards an anti-poverty strategy for South Africa (The Presidency, 2008).	Aspects include sectoral strategies, outcomes and target formulation, public participation, data collection surveys.
The World Bank and support partners: Investigation of pro-growth and pro-poor LED in South Africa (World Bank, 2006).	No specific step-by-step process.
Australia South Africa Local Government Partnership (ASALGP): A handbook for officials about LED (ASALGP, 2005).	Aspects include economic sectoral strategies, social development strategies such as education, health, provision of basic needs, social cohesion.
US Dept of Housing and Urban Development: Economic development toolkit (US Dept of Housing and Urban Development, 2010).	The investigation listed a specific research methodology when doing LED/rural strategy formulation.
UN-Habitat: Promoting local economic development through strategic planning (UN-Habitat, 2005).	A seven-step process, namely allocation of responsibility, engagement of stakeholders, collection of data, involvement of public, analyse data, develop action plans.
LGSPA: Strategic local economic development (LGSPA, 2009).	A 10-step process, namely assessment of existing conditions, local resources and barriers, select goal and market sectors, determine general approach, identify intervention activities, write mission statement, prepare economic strategy, develop action plans for implementation, monitor and evaluate plan.
Swinburn, Goga and Murphy: Local economic development: A primer developing and implementing local economic development strategies and action plans (Swinburn <i>et al.</i> , 2006).	A 10-step process, namely getting started, stakeholders and participation, situation analysis, visioning, setting objectives, identifying and evaluation of strategic options, action planning, plan implementation, monitor, evaluate, adjust and modify.
Oklahoma State University: Blueprints for your community's future: Creating a strategic plan for local economic development (Oklahoma State University, 2008).	A five-step process, namely organising the effort, local economic assessment, formulating, implementing and reviewing the strategy.
Planning LED: Theory and practice by Blakely and Bradshaw, (2002).	A five-step process, namely organising the effort, local economic assessment, strategy making, implementation and review.
	A 10-step process, namely begin the process, engage local community, form an organised structure, conduct community assessments, develop strategic plan, seek community feedback, implement plan, evaluate effort, celebrate the success and create an ongoing process.
	A step-by-step process for compilation of a LED strategy.

**Source:** Author's own compilation from various sources as listed in the table.

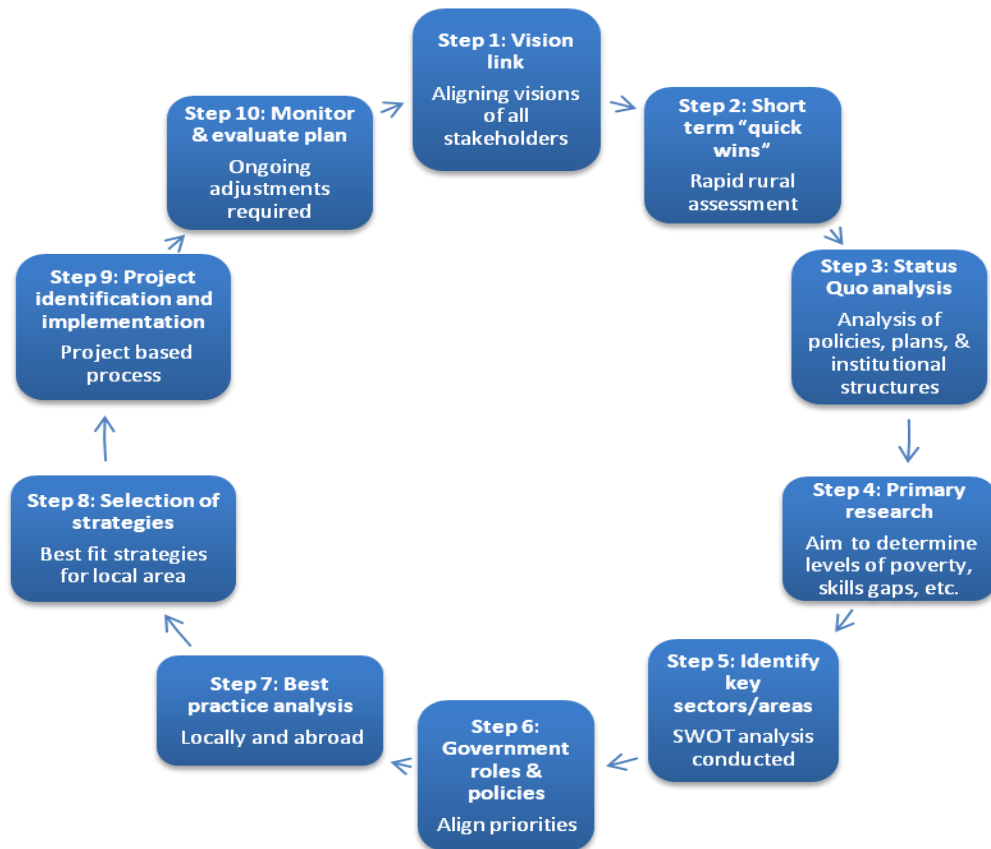
In designing a model for rural development strategy formulation, the attempts as listed in table 1 by other organisations and researchers have formed the basis of this newly-formulated model. The proposed model, named the “*Feza iSimangaliso*” model, which is the isiZulu term for “*achieving a miracle*”, is based on the strategic planning process. It is a step-by-step process for compilation of a rural development strategy. Although it is accepted that every

rural locality is unique with different challenges and opportunities, which requires a “best fit” process, the aim of the model is to provide a basic guideline for rural development implementation country-wide. The model follows the principles of participation and partnership promotion, with an integrative approach linking spatial planning with economic planning. Figure 1 lists the various steps in the process, with a detailed description contained in Meyer (2013).

The various steps in the process are explained as follows:

### Step 1: Vision link

The first step must ensure that all stakeholders in the region are united with an acceptable and generally agreed regional development vision. The vision of the local authority in terms of the local strategic planning process needs to be assessed regarding its relevancy regarding rural development and linked with that of the relevant stakeholders such as local communities and businesses in the area. The overall vision must form the basis of the rural strategy and serve the purpose of providing a unified vision for the region supported by local business and local communities. Another important factor that must be taken into account in vision formulation is the impact of national and provincial policies such as the NGP and the NDP.



**Figure 1:** Summary of the ten step “Feza iSimangaliso” rural development model (Author’s own figure).

## **Step 2: Short term “quick wins” projects**

This step is initiated through a “rapid rural assessment” (RRA) (Meyer, 2013) focusing on key sectors such as agriculture, public services, community development, environment, infrastructure development and skills development. Such an assessment must be completed for the area in the early phase of the policy formulation. Some pre-planning work is required before a RRA could be conducted. Local strategic policy documents such as the local IDP, LED, SDF and annual report must be studied for example.

A range of short-term or “quick wins” projects, which are easy to “kick-off” must be identified and implemented immediately. Examples of projects could include food gardens, skills acquisition, on-the-job training programmes, expanded public works programme (EPWP) projects, community clean-up projects, and the provision of infrastructure for the informal sector. Such projects should be implemented in order to show immediate positive results. This will enhance stakeholder confidence and support in the overall, long-term strategy process, by showing early positive results.

## **Step 3: Status quo analysis**

This step is initiated by the in depth analysis of local strategic policy documents such as the annual report, the budget, IDP, LED, SDF, and any other existing strategic planning documents. These documents will provide the framework for the development of the integrated rural strategy for the region including spatial planning. The availability of up-to-date base line socio-economic data also needs to be determined at this stage, including information on level of poverty, unemployment, skills gaps, level of basic services, etc. Local infrastructure and local institutional structures should also be analysed in order to determine its suitability with regard to the implementation of the strategy.

## **Step 4: Primary research**

At this point in the process, a decision needs to be taken with regards to the usefulness and “up-to-dateness” of existing statistics. The usefulness of available socio-economic data as listed in step 3 must be determined as soon as possible. Based on the principle that good information leads to good planning, socio-economic data, business surveys (for example an early warning system), unemployment rates and skills levels are needed and a database of the relevant data must be created. Further research will be conducted to determine trends in the area. A skills gap analysis is required in order to determine what skills are needed by local business compared to the skills that local communities have acquired. This analysis will also inform the task team as to the type of skills training projects that is required in the area. Primary research will be required if recent base line information is not available. The type of survey needed will determine the type of questionnaire to be utilized. If so required and in most cases it is recommended, an early warning systems (EWS) business survey should be conducted annually. Such a survey will allow the local municipality to identify negative and positive trends in the local business environment and implement interventions.

## **Step 5: Identify key developmental sectors/areas**

This step aims to identify those sectors and areas which are critical in unlocking the development potential of the area. Major stumbling blocks must be identified and addressed. A SWOT analysis could be completed in this regard to assist with the identification of key areas and sectors for development. Areas and sectors as listed in the national economic development policy, the (NGP), such as industrial development, manufacturing, mining the green-economy, agriculture, agro-processing, tourism and the informal sector, to name but a few, must be identified and will form the core of the strategy. Spatial development directives must also be linked to the economic sectoral planning initiatives.

### Step 6: Analysis of government roles and policies

This step aims to align the priorities of all spheres of government involved in the rural region and will prescribe how these policies could be implemented in the area. An analysis of all policies, funding options, the roles of the various spheres of government, partnership formation and skills development will be completed. This analysis will be conducted within the scope of the NSDP, NGP, NDP, community works programme (CWP), EPWP, CRDP and national youth development programme (NYDP), as well as any other applicable provincial and local policies and programmes.

The analysis of all three spheres of government will point out any duplications or gaps in the policy formulation and implementation process. This step must also analyse the institutional arrangements existing in the region with regards to all spheres of government. The following aspects need attention with the view to accelerate implementation of projects namely, the existence and capacity of the LED unit, the level of focus of the departments on economic and social development, the quality and existence of the IDP, LED, SDF and engineering master plans, the extent and capacity of a projects implementation unit, the level of operationality of the ward committees linked to CDW's in the region, the existence and functionality of portfolio committees regarding rural developmental aspects and the local partnerships between local government and local business.

### Step 7: Best practice analysis

This step includes an analysis of local and global best practice, procedures, principles and projects that could be suitable and similar to the local economic and spatial situation of the specific region. For example the economic strategy for Fezile Dabi District Municipality in the northern Free State Province and the economic strategy in the Fetakgomo Local Municipal area, Limpopo province, where the mining and industrial sectors were also dominating the local economy with a threat of diminishing production, will be analysed. Lessons learnt from these case studies could assist in local policy formulation.

### Step 8: Selection of strategies

Various strategies that focus on job creation, sustainable development and improvement of quality of life must be identified. Strategies can include a pro-poor focus, demand driven projects, mass job creation or the provision of "decent jobs", agro-processing in agricultural economies, provision of basic needs and improvement in quality of life. In order to guide future policy developers at local government, the following generic strategies are listed as a guideline of use in most areas including rural areas:

- Improvement and strengthening of **institutional structures and arrangements**: Strong institutional structures are needed for successful implementation of strategies. This strategy could include an institutional analysis of internal and external structures in the region, a regional marketing and investment plan, and a focus on partnership formation and co-ordination on all spheres and business.
- Support and strengthen the **agricultural sector**: Study area, as with most rural areas, is dominated by agricultural land use. This strategy could include a strategy to train local people by means of agri-business incubators centres, improve rural infrastructure, support the improved optimal use of agricultural land, accelerate the land reform programme to allow rural people access to land, and the development of the agro-processing and value added sectors.
- Support and improved linkages to the **mining sector**: Mining is an important sector in the rural economy and the sector is in general decline. Specific strategies in the sector include improved linkage with existing mines by linking local industry and service providers to

mining operations, support existing and declining mines, and research regarding the potential new mines in the region.

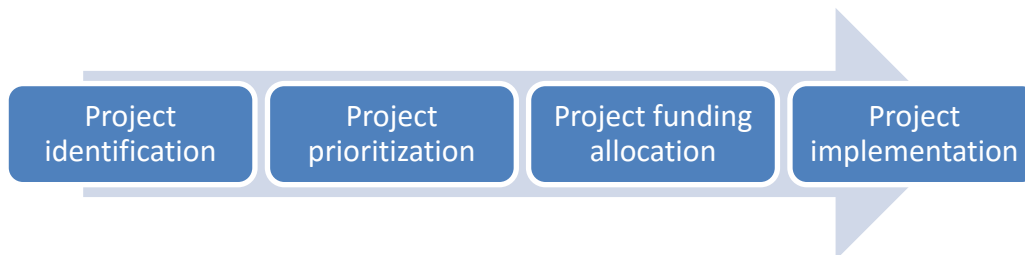
- Support and strengthen the **manufacturing/industrial sector**: In a rural development plan, any manufacturing/industrial development plan needs to be linked to the agricultural sector which can provide the raw products for value added manufacturing in agro-processing. Other strategies could include the improvement of the local economic environment by providing incentives, land and infrastructure, support to high growth and struggling industries and ongoing research such as an annual EWS.
- The optimal development of the **“green economy”**: This strategy could also find linkage to the manufacturing sector. Renewable energy source production strategies should be investigated, access for communities to renewable energy sources, improved waste management, re-cycling and a cleaner environment, improved water access and security and the provision of sustainable food sources.
- **Tourism development**: In rural economies, tourism has the highest development potential after the agricultural sector. Rural areas, with its attractive and relaxed environment have all the ingredients to attract tourists. The tourism sector is also known for its labour intensive character. This strategy could include an analysis of the local institutional structure, municipal support to the sector through marketing, grading and training support and other initiatives, and ensure tourism facilities are well maintained.
- Support and development of the **informal economic sector (second economy)**: Strategies include assistance with linkage to formal business, access to finance, provision of facilities and trade areas, provision of technical and business skills, set-up of small business support centres, and encourage “home industries”.
- **Entrepreneurial and small, micro and medium enterprise (SMME) development and support**: This strategy links with all the other strategies and could include training incubators centres with mentors, research in new markets and products, annual EWS, support small black business development, relaxation of local regulations, provision of key infrastructure, and creation of a positive local business environment.
- **Education and skills development**: This strategy includes an assessment of skills development in the region and the education facilities in the region, implement a skills development plan focused on technical and business skills development, and the integration of this strategy into all the other strategies as listed. An educational plan including all levels of training from early childhood development to adult education must be completed by projects be identified for implementation.
- **Infrastructure development**: Infrastructure development is a support system for economic and social development. Infrastructure development include both “hard” and “soft” infrastructure. This strategy could include regional “hard” infrastructure planning and implementation strategies, and provision of “soft” infrastructure such as community facilities.
- **Provision of social development and basic needs**: This strategy should be initiated through a community facility assessment. This study would identify gaps in the provision of social and community facilities regarding education, health, sports and other community facilities. The next step would then be to prioritise the provision of social facilities in a specific region. Existing community facilities needs to be analysed in terms of feasibility and impact on local community and be improved if need be. A key component in the identification of community facilities is the input of local CDW’s. A basic needs analysis



will also be required in order to determine backlogs regarding basic needs such as food, housing, services and education. The development of food gardens and local agricultural projects are important for improvement of quality of life.

### **Step 9: Project identification and implementation**

This step includes the following actions as listed in Figure 2.



**Figure 2: Project identification process** (Author's own diagram).

In the project identification process all stakeholders in the rural development environment must be consulted namely government, business and the local communities. Key participation structures include ward committees and CDW's. Local project prioritization requires a selection criteria process for examples projects will be evaluated regarding priorities as set out in the local area. Criteria could include aspects such as improvement of quality of life and sustainability.

### **Step 10: Monitor and evaluate plan**

The successes and failures of the strategy must be monitored and evaluated. Success needs to be reported and marketed while failures need to be addressed. Ongoing adjustments will be required to ensure success. Measurable development indicators must be formulated in line with both national and local development goals. Examples of indicators are listed as follow: level of economic growth, percentage of unemployment, number of jobs created, poverty levels, literacy rate, housing backlog and house delivery, services provided such as water, sanitation and electricity, crime rates, health issues such as HIV infection rate, gross domestic product (GDP) per capita, skills provided, levels of education, sectoral contributions to local GDP, government activities and level and extent of "red tape" procedures, Gini-coefficient on income, access to finance, infrastructure provided, number of new and extended businesses, export growth, level of economic diversification, EWS (surveys, confidence, perceptions), and LED projects.

## **5. CONCLUSION**

The contribution of rural regions and the agricultural sector are pivotal for economic growth, food security, social cohesion and political stability. The global tide is slowly turning to an increased interest in rural development and rural areas. Reasons for this discourse in rural attractiveness are over-population and congestion of large urban areas, global climate changes, globalization and technological advances leading to space shrinking, an increasing need for food and land, a growing need of belonging and lastly sustainable development initiatives.

There has been a rural development paradigm shift over the last few decades. This has been from an agricultural-focused rural development policy with a narrow approach on farming and food security, to an integrated rural development approach including a multi-sectoral attitude, diversification of the economy, value-added processes, and an attractive rural

environment with strong local community development and decentralised decision-making processes. This led to a vision of rural development and a strategy should focus on job creation, economic stability, diversification of the economic base and quality community facilities (Blakely & Bradshaw, 2002). Rural development is an integrated and comprehensive war on poverty, unemployment and inequality, which includes all aspects of society *inter alia* social, economic, political, spatial, environmental, cultural and institutional components. A rural region will develop if the rate of economic development (not economic growth) exceeds the population rate. Economic development must lead to improved quality of life of all residents of a region, which is achieved through access to basic needs leading to social and economic freedom. Usually, rural areas and the agricultural sector are seen in a negative light, and industrial development is seen as the solution to economic development. This viewpoint has been proven incorrect, and a balanced economic developmental sector approach is required. The “big push theory” as formulated by Rosenstein-Roden (1943), requires a nation to come together and unite with one vision; this unity must be on such a level that dynamic cooperation and coordination will lead to high levels of economic development.

## LITERATURE

1. ANC *see* African National Congress.
2. African National Congress (ANC). (1994). *Reconstruction and Development Programme (RDP): A Policy Framework*. Johannesburg: Umanyano.
3. Anriquez, G., & Stamoulis, K. (2007). Rural Development and Poverty Reduction: Is Agriculture still the key?. The Food and Agriculture Organization of the United Nations. ESA Working Paper no 07-02 June 2007. Rome. Retieved on 25 June 2015 from [www.fao.org/es/esa](http://www.fao.org/es/esa).
4. ASALGP *see* Australia South African Local Government Partnership.
5. Ashley, C., & Maxwell, S. (2001). Rethinking rural development. *Development policy review*, 2001, 19(4): 395-425. London: Wiley Publishers.
6. Australia South Africa Local Government Partnership (ASALGP). (2005). A handbook for provincial and municipal elected and appointed officials about local economic development. Retrieved on 21 February 2015 from [www.devplan.kzntl.gov.za/ASALGP](http://www.devplan.kzntl.gov.za/ASALGP).
7. Bester, C.W. (1994). Consequences of urbanization and westernization on black family life in South Africa. *Social Work*, 30(2). Stellenbosch: University of Stellenbosch.
8. Blakely, E.J. & Bradshaw, T.K. (2002). *Planning Local Economic Development: Theory and Practice*. 3rd edition. California: Sage.
9. Buxton, E.B. (1976). *Delivering Social Services in Rural Areas*. In Ginsberg, L.H. Ed. New York: Council for Social Work Education.
10. Davis, J. (2004). Using the Rural economic and enterprise development (REED) framework for analysis and joint action: implications for spatial development. Natural Resources Institute (NRI). Retrieved 25 June 2014 from <http://www.nri.org>.
11. De Satge, R. (2010). *Rural Development in South Africa*. Johannesburg: Phuhlisani Publishers.
12. Delius, P. & Schirmer, S. (2001). *Towards a Workable Rural Development Strategy*. Trade and Industrial Secretariat (TIPS). Johannesburg: University of Witwatersrand.
13. Department of Provincial and Local Government (DPLG). (2003). *Local Economic Development*. A resource book for municipal councillors and officials. Pretoria: Government Printer.
14. Department of Rural Development and Land Reform (DRDLR). (2010a). A study on the revitalization of rural towns and regions in South Africa. Pretoria: Government Printer.
15. Department of Rural Development and Land Reform (DRDLR). (2010b). *Comprehensive Rural Development Strategy (CRDP)*. Pretoria: Government Printer.

16. Djukanovic, V. & Mach, E.P. (1975). *Alternative Approaches to Meeting Basic Health Needs in Developing Countries*. UNICEF/WHO study. Geneva: World Health Organization.
17. DPLG *see* Department of Provincial and Local Government.
18. DRDLR *see* Department of Rural Development and Land Reform.
19. Duranton, G. (2008). *Cities: Engines of Growth and Prosperity for Developing Countries. Working Paper no 12*. Commission on Growth and Development. Washington.
20. Duxbury, N., Campbell, H. & Keurvorst, E. (2009). *Developing and Revitalizing Rural Communities*. Toronto: Creative City Network of Canada.
21. Heimann, C. (2010). Comprehensive Rural Development Programme. Presentation by Chief Director of Dept of Rural Development and Land Reform. ISAD multi-stakeholder forum, 25 February 2010.
22. Hemson, D. (2004). *Rural Development, the Provision of Basic Infrastructure Services*. Integrated Rural and Regional Development. Pretoria: HSRC.
23. IFAD *see* International Fund for Agricultural Development.
24. IIED *see* Institutional Institute for Environment and Development.
25. International Fund for Agricultural Development (IFAD). (2011). Enabling poor rural people to overcome poverty. Rural poverty report, 2011. Retrieved 23 September 2014 from [www.ifad.org/rpr2011](http://www.ifad.org/rpr2011).
26. Institutional Institute for Environment and Development (IIED). (2000). Rural planning of South Africa: A case study. Retrieved 10 August 2014 from [www.iied.org](http://www.iied.org).
27. Kakumba, U., & Nsingo, S. (2008). Citizen participation in local government and the process of rural development. The rhetoric and reality in Uganda. *Journal of public administration*, 43(2). Jun 2008. Pretoria: SAAPAM.
28. Kenyon, P. (2008). Rural revitalization and the need to create sustainable, healthy and resilient communities. Bank of ideas. Retrieved 23 January 2015 from [www.bankofideas.com.au](http://www.bankofideas.com.au).
29. LGSPA *see* Local Government Support Program in ARMM.
30. Local Government Support Program in ARMM (LGSPA). (2009). *Strategic Local Economic Development: A Guide for Local Governments*. Davao City, Philippines.
31. Meyer, D.F. (2013). An exploration of rural development strategies: The case of the northern Free State. Vanderbijlpark: NWU. (Thesis – PhD).
32. Mokopane, T. (2006). Poverty in South Africa. *The Star*. 13 July 2006. p4. Johannesburg.
33. Nationmaster. (2011). People statistics. Retrieved 8 December 2014 from [www.nationmaster.com/graph](http://www.nationmaster.com/graph).
34. Netshitenzhe, J. (2011). Addressing challenges of poverty. UJ Colloquium on poverty by J. Netshitenzhe, Executive Director: MISTRA, 21 Jul 2011. Johannesburg.
35. NRI *see* National Resources Institute.
36. OECD *see* Organization for Economic Cooperation and Development.
37. Oklahoma State University. (2008). Blueprints for your community's future: Creating a strategic plan for local economic development. Oklahoma: Oklahoma State University.
38. Organization for Economic Cooperation and Development (OECD). (2006a). Investment in priorities for rural development. Conference held in Edinburgh, Scotland, 16 – 19 Oct 2006.
39. Organization for Economic Cooperation and Development (OECD). (2006b). Reinventing rural policy. *Observer*. Oct 2006.
40. Organization for Economic Cooperation and Development (OECD). (2007). Competitive cities: a new entrepreneurial paradigm in spatial development. Retrieved 12 April 2015 from [www.oecd.org/rights/](http://www.oecd.org/rights/).

41. Rogerson, C.M. (2009). Strategic Review of local economic development in South Africa. Final report submitted to Minister S Shiceka of Department of Development Planning and Local Government (DPLG). Commissioned by DPLG and GTZ. May 2009. Johannesburg.
42. Rosenstein-Roden, P. 1943. Problems of Industrialization of Eastern and South-Eastern Europe. Economic Journal, 53: 202-211. London: Wiley Publishers.
43. Sibisi, S. (2009). Brushing against the grains of history: making local economic development work in South Africa. Development planning division, working paper series no 5. DBSA, Mar 2010. Midrand.
44. Swinburn, G., Goga, S. & Murphy, F. (2006). Local Economic Development: A Primer Developing and Implementing Local Economic Development Strategies and Action Plans. Washington: The World Bank.
45. The Presidency. (2000). Integrated Sustainable Rural Development Strategy (ISRDS). Pretoria: Government Printer.
46. The Presidency. (2003). National Spatial Development Perspective (NSDP). Pretoria: Government Printer.
47. The Presidency. (2008). Towards an anti-poverty strategy for South Africa. Pretoria: Government Printer.
48. The Presidency. (2011). Diagnostic report 2011. National Planning Commission (NPC). Pretoria: Government Printer.
49. UNDP *see* United Nations Development Programme.
50. United Nations Development Programme (UNDP). (2012). Triple wins for sustainable development. New York: Bureau for Development Policy.
51. UN-Habitat. (2005). Promoting local economic development through strategic planning. Nairobi.
52. US Department of Housing and Urban Development. (2010). Economic development toolkit. Retrieved 21 February 2015 from [www.hud.gov](http://www.hud.gov).
53. Wilkinson, K.P. (1986). The Small Town Community: Its Character and Survival. Pennsylvania: Pennsylvania State University.
54. World Bank. (1997). Taking action to reduce poverty in Sub-Saharan Africa: Development practice. Washington.
55. World Bank. (2006). Investigation of pro-poor local economic development in South Africa. Washington.
56. Zuma, J.G. (2011). State of the Nation Address. Retrieved 12 April 2015 from <http://www.info.gov.za/speech>.

## INFORMATION AND COMMUNICATION TECHNOLOGIES USAGE IN CROATIAN ENTERPRISES

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### **ABSTRACT**

*In today's world, information and communication technologies (ICT) are crucial for social and economic development. Efficiency and competitiveness of enterprises depends largely on the acceptance and use of modern technologies. Any delay in the process of computerization can have serious repercussions for business operations. Therefore, it is important for enterprises, regardless of their type and size, to harness digital technologies to produce competitive advantage. With this in mind, the present study examines the use of ICT in Croatian enterprises. The analysis was focused on the period from 2007 to 2014. According to the available data, Croatian enterprises have highly integrated ICT into their business practices. The vast majority of enterprises use computers in daily operations and have the internet access, mostly through broadband. Over the past few years, the number of mobile broadband users has significantly increased. The percentage of enterprises with a website has also increased over time. However, there are areas that require improvement. Although more and more Croatian companies buy and sell goods and services over the internet, e-commerce is still not widespread. The same is true for the use of social media. In order to gain a more realistic picture of ICT use in Croatian enterprises, a comparison with the European Union countries has been made. The study also highlighted problems in obtaining data and emphasized the need for systematically collected information on ICT use that can be compared over time. Without such information it is not possible to develop adequate strategies and policies.*

**Keywords:** *Croatian enterprises, e-commerce, ICT, internet access, social media, strategies and policies*

### **1. INTRODUCTION**

Information and communication technologies (ICT) have become indispensable in all aspects of human life and society. As a result of the development and application of modern technologies, the business world has also dramatically changed in the past few decades. Even traditional business sectors are strongly influenced by ICT. Without any doubt, the importance of technology will continue to grow. In such a world, ICT are crucial for social and economic progress.

In the information and knowledge society, companies have to develop competitive advantages based on implementation of innovations and emerging technologies. This applies particularly to small and medium-sized enterprises (SMEs) since their survival and growth depends largely on factors that are not under their control. Such firms are urged to use ICT to transform their business models and strategies, create flexible and innovative solutions, perform a number of

routine and also highly specialized procedures and tasks, integrate working processes, increase productivity, support problem solving, and improve exchange of information and communications. Network technology also reduces the supremacy of long-established companies and allows new firms to reach customers more easily. Moreover, SMEs are able to use ICT in innovative ways much quicker and in a more effective manner than can older and larger companies (Passerini, El Tarabishy, Patten, 2012). In this way, ICT enable enterprises, regardless of their type, size, location, and structure, to compete in today's complex and dynamic markets.

ICT provide many benefits to enterprises (Barba-Sánchez, Martínez-Ruiz, Jiménez-Zarco, 2007). Therefore, their efficiency and competitiveness depends largely on the acceptance and use of modern technologies. Tansey (2002) concluded that for businesses, ICT are only a means to an end. Nevertheless, there are an increasing number of companies for which ICT are not just a tool, but a fundamental catalyst in realizing their vision and mission. Since the efficiency and competitiveness of enterprises depends largely on the acceptance and use of modern technologies, companies have to follow the development of ICT and continuously invest in new equipment. Any delay in this process can have a negative impact and serious repercussions for business operations. Having regard to the above mentioned, it is important for enterprises to harness digital technologies to produce competitive advantage if they want to survive and develop in today's global market. In doing so, the implementation of ICT should be carefully planned and organized because many organizations fail in the application of modern technologies (Gottschalk, 2007).

The main aim of this study was to examine the use of ICT in Croatian enterprises. With respect to the available data, the analysis was focused on the period from 2007 to 2014. Since these issues have not been adequately addressed, the present study fills the gap in the literature and extends the existing knowledge on ICT usage in Croatian enterprises.

## **2. PREVIOUS RESEARCH**

The level of ICT usage is one of the most important indicators of the socio-economic well-being. The technology is more widely available and used in developed countries than developing ones. The lag in ICT adoption further increases the gap between the richer and poorer nations. In this section the results of some studies which examined the use of ICT in business are presented.

Hashim (2007) explored the extent of ICT use and adoption among owners of SMEs in Malaysia. The author found that their use of ICT was low and that their adoption of ICT was slow. Hashim also concluded that companies must be capable of adopting new technologies to effectively respond to the rapid changes.

The study of Frempong (2007) analysed trends in ICT usage by SMEs in Ghana. One of the findings was that the internet became an important business tool. However, according to the results the internet was not yet integrated into operations of the Ghanaian SMEs. Also, e-banking services were poorly used.

The objective of the study by Harindranath, Dyerson, and Barnes (2008) was to determine the ICT use by SMEs in the southeast of England. Their results suggest that most firms were general positively inclined towards adoption and use of ICT, but their application was mainly focused on operational matters.

The aim of the paper by Dewan, Dewan, and Nazmin (2009) was to compare the use of ICT by privatized and non-privatized state owned enterprises. The authors found that the adoption of ICT within state owned enterprises under privatization was in the very early stage. On the contrary, the privatized enterprises tended to use the internet and ICT equipment for business purposes.

Žnidaršič and Werber (2012) made comparison of ICT usage in Slovenian micro enterprises in 1999 and 2009. As expected, the authors found that enterprises were much better equipped with ICT in 2009 than ten years ago. However, the study showed that in 2009 firms used less business software products than in 1999. This was to a large extent the result of their increased orientation to outsourcing of accounting and bookkeeping services.

Mokaya (2012) investigated the adoption of ICT by small enterprises in Kenya. His study revealed that ICT were not sufficiently used. One of the main reasons for this was the inability of entrepreneurs to invest in equipment. In this sense, the author confirmed that there is statistically significant positive relationship between financial capacity and the level of ICT adoption. Mokaya also found that most entrepreneurs believe that the cost of ICT equipment is too high.

The study of Ladokun, Osunwole, and Olaoye (2013) investigated the factors affecting ICT adoption and use by SMEs in Nigeria. The authors concluded that firms in Nigeria have been slow in adopting ICT for various reasons such as poor telecommunication infrastructure, high costs of equipment, insufficient level of ICT literacy, inability to integrate technology into business operations, weak ICT strategies, and problems in ICT implementation.

The purpose of the study by Kordha et al. (2013) was to explore the use of ICT by SMEs in Albania. Their analysis revealed that most companies have PCs and ADSL internet connections, but they mostly do not use any devices. The authors consider that it is necessary to encourage the wider use of ICT in enterprises and also exploit social media for business purposes.

### 3. METHODOLOGY

The present study relies on the data of the Croatian Bureau of Statistics and Eurostat. These data are estimates obtained through the surveys conducted in the period from 2007 to 2014 on the basis of the Official Statistics Act. The surveys followed the Eurostat guidelines. Since the questionnaires were harmonised at the European Union level, the data are comparable with those of other countries.

According to the methodological notes of the Croatian Bureau of Statistics, the surveys were conducted on the samples consisted of approximately 4000 to 4500 enterprises, depending on the year. The percentage of the sampled population was between 36% and 49%, while the response rate ranged from 41% to 77%. The sampling was based on data from the Business Register of the Republic of Croatia. The data were collected using both an online and a postal survey. RIM (Random Iterative Method) weighting procedure was used to align the sample data with those of the population.

### 4. RESULTS

Table 1 presents the data on ICT usage in Croatian enterprises in the period from 2007 to 2014. These data are also shown graphically (Figure 1).

The data indicate that a very small number of Croatian enterprises do not use computers and the internet in their business. In 2014, there were only 4% of companies who did not integrate ICT into their practice. The percentage of enterprises with computers and the internet access has hardly changed during the analysed period.

The use of fixed and mobile broadband internet connection is in line with technological changes and shows a growing tendency. The increase of mobile broadband usage has been particularly significant in recent years. In 2014, almost two-thirds of Croatian enterprises had a mobile broadband connection.

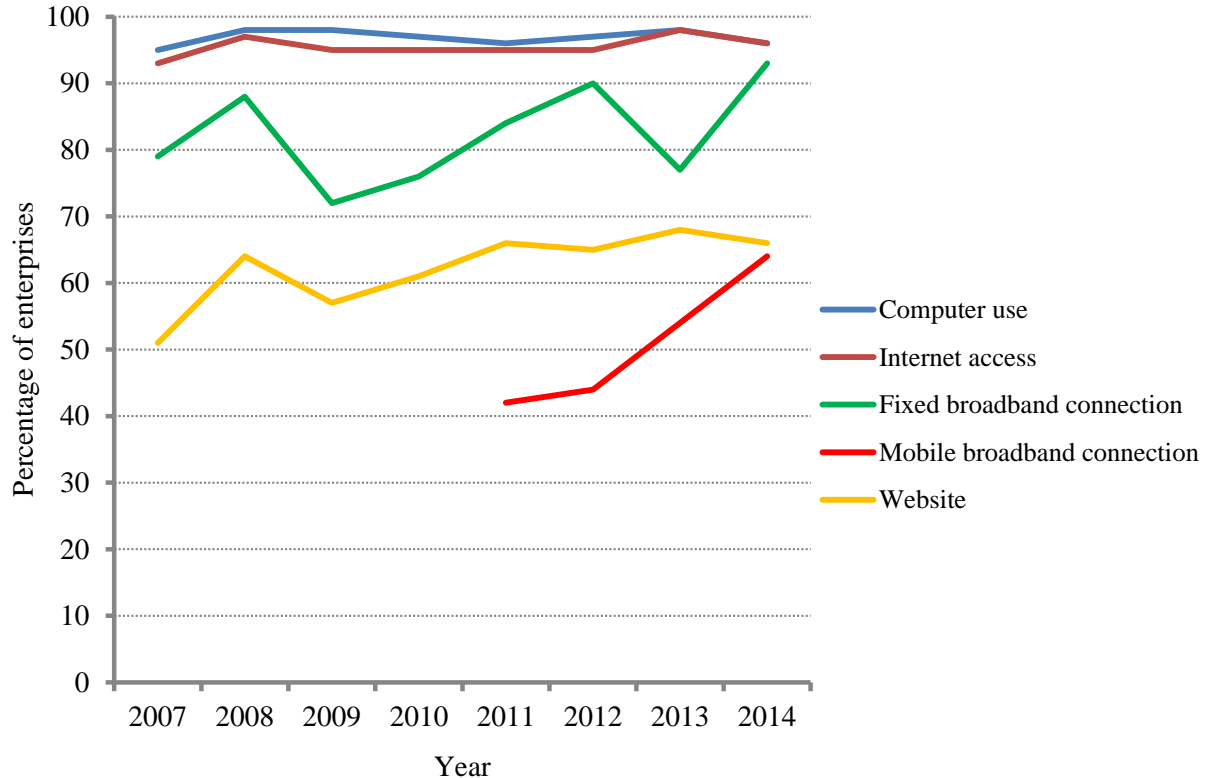
*Table 1. Computer use, internet access, fixed and mobile broadband connections, and website by Croatian enterprises (% of enterprises)*

Year	Computer use	Internet access	Fixed broadband connection	Mobile broadband connection	Website
2007	95	93	79	N/A	51
2008	98	97	88	N/A	64
2009	98	95	72	N/A	57
2010	97	95	76	N/A	61
2011	96	95	84	42	66
2012	97	95	90	44	65
2013	98	98	77	54	68
2014	96	96	93	64	66

Note: N/A = not available.

Source: Croatian Bureau of Statistics (2007), Croatian Bureau of Statistics (2008), Croatian Bureau of Statistics (2009), Croatian Bureau of Statistics (2010), Croatian Bureau of Statistics (2011), Croatian Bureau of Statistics (2012), Croatian Bureau of Statistics (2013), Croatian Bureau of Statistics (2014), Eurostat [isoc\_ci\_cd\_en2].

The percentage of enterprises with a website has also increased during the analysed period. In 2007, approximately half of firms had a website, while in 2014 there were 66% of companies with a website.



*Figure 1. ICT usage in Croatian enterprises*



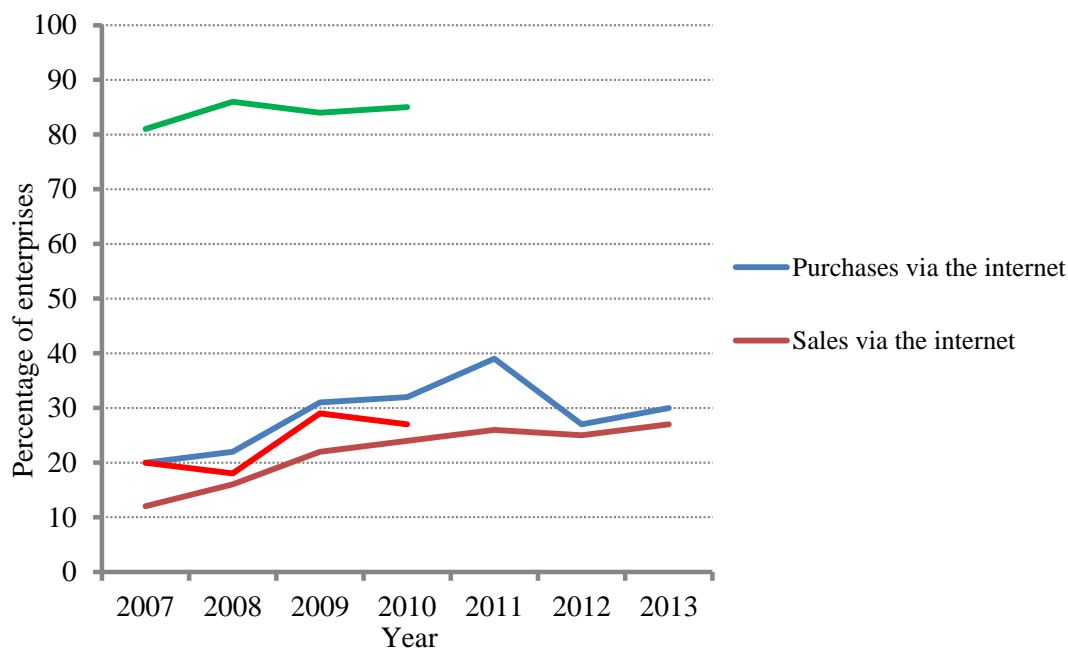
Table 2 presents the data on internet usage by Croatian enterprises in the period from 2007 to 2013. The data for 2013 were published by Eurostat, while the other data were provided by the Croatian Bureau of Statistics. The data are also graphically represented in Figure 2. More recent data are not available as they are no longer collected.

*Table 2. Internet usage by Croatian enterprises (% of enterprises)*

Year	Purchases via the internet	Sales via the internet	Financial and banking services	Staff training
2007	20	12	81	20
2008	22	16	86	18
2009	31	22	84	29
2010	32	24	85	27
2011	39	26	N/A	N/A
2012	27	25	N/A	N/A
2013	30	27	N/A	N/A

Note: N/A = not available.

Source: Croatian Bureau of Statistics (2007), Croatian Bureau of Statistics (2008), Croatian Bureau of Statistics (2009), Croatian Bureau of Statistics (2010), Croatian Bureau of Statistics (2011), Croatian Bureau of Statistics (2012), Eurostat (2014).



*Figure 2. Internet usage by Croatian enterprises*

The internet allows a more effective way to offer and sale products and services on the market. At the same time, the internet enables enterprises to find and order products and services quickly and easily. On the basis of available data, it can be concluded that online trading showed a growing tendency, except in 2012. However, the volume of e-commerce transactions is still quite small in comparison to traditional commerce. In 2013, only 11% of total sales were generated over the internet (Croatian Bureau of Statistics, 2013). A year later, Croatian enterprises realised 13% of their turnover via the internet (Croatian Bureau of Statistics, 2014), which indicates that there are many possibilities for development of e-commerce.

In the context of e-commerce, it is also interesting to look at the use of social media for business purposes. Social media has changed the way enterprises interact with their customers, enabling a more personalized user experience. If used in a proper manner, social media can be a very powerful business tool that allows companies to reach a large audience at a low cost. Data on the use of social media in Croatian enterprises have been collected since 2013. In 2014, 37% of Croatian enterprises used at least one of the social media platforms, mainly for the purpose of advertising and exchanging information with customers (Croatian Bureau of Statistics, 2014). Due to the growing popularity of social media, it is expected that this percentage will significantly increase in the next few years.

Croatian enterprises to a large extent use financial and banking services available via the Internet. On the other hand, enterprises have been less inclined to use the internet for training and education of their employees. In 2010, about a quarter of enterprises used the internet for such activities. As previously mentioned, more recent data are not available so it is not possible to draw conclusions for the period after 2010.

Table 3 presents the data on e-government usage by Croatian enterprises in the period from 2007 to 2013. These data are also shown in Figure 3.

*Table 3. E-government usage by Croatian enterprises (% of enterprises)*

Year	Public administration services	Obtaining information	Obtaining electronic forms	Submitting completed forms	Treating administrative procedures	E-procurement
2007	51	45	48	33	N/A	20
2008	57	51	54	37	33	16
2009	61	56	56	37	36	13
2010	63	57	59	43	41	16
2011	86	72	78	63	49	14
2012	88	74	76	71	60	18
2013	92	78	84	81	N/A	19

Note: N/A = not available.

Source: Croatian Bureau of Statistics (2007), Croatian Bureau of Statistics (2008), Croatian Bureau of Statistics (2009), Croatian Bureau of Statistics (2010), Croatian Bureau of Statistics (2011), Croatian Bureau of Statistics (2012), Croatian Bureau of Statistics (2013), Eurostat [isoc\_bde15ee].

E-government improves efficiency of public service delivery and enables enterprises to interact with authorities in different ways and for a variety of purposes. Usage of e-government services by Croatian enterprises increased significantly from 2007 to 2013. According to the data, in 2013 there were 92% of companies who used some of public administration services. Except e-procurement, usage of other e-government services showed a strong upward trend in the analysed period. In 2013, 19% of Croatian enterprises used e-procurement system, which is less than in 2007.

During 2013, obtaining electronic forms was the most frequent type of interaction with public administration, followed by submitting completed forms and obtaining information from public authorities' websites.

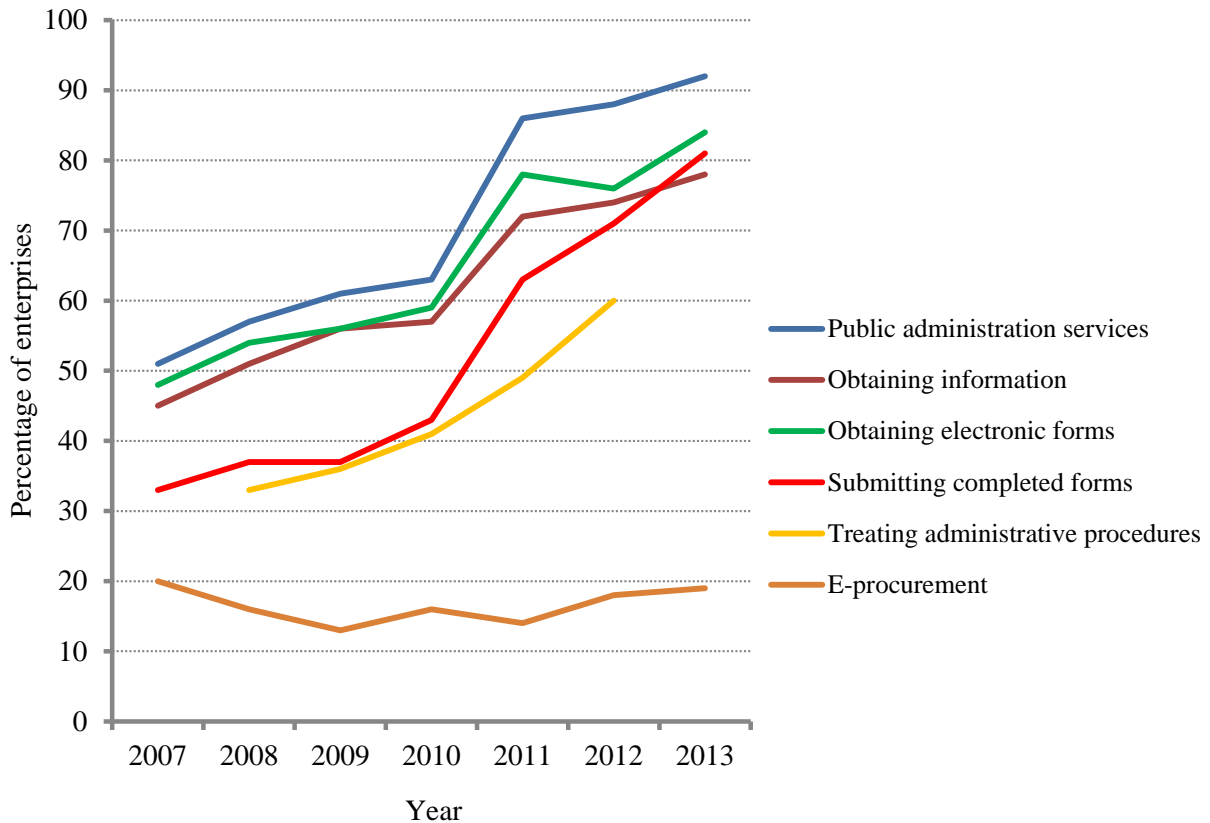


Figure 3. E-government usage by Croatian enterprises

In order to gain a more realistic picture of ICT use in Croatian enterprises, it is necessary to make a comparison with the European Union countries. According to the data from 2014, the percentage of Croatian enterprises with the internet access was slightly below the European Union average of 97% (Eurostat [isoc\_ci\_in\_en2]). With respect to the fixed broadband connection, the data for 2014 indicate that Croatia was somewhat above the European Union average of 92%, while the share of Croatian enterprises that used mobile broadband connection was equal to the European average (Eurostat [isoc\_ci\_it\_en2]). In the same year, the percentage of companies that had a website was quite below the European Union average of 74% (Eurostat [isoc\_ci\_cd\_en2]).

According to the Eurostat data for 2013, Croatian enterprises were at the forefront in online sales, but above the European average in online purchases. In 2013, 18% of European enterprises conducted sales via the internet, while 38% of companies received online orders (Eurostat, 2014).

Over the past years significant efforts have been made by Croatian authorities to improve the effectiveness of public administration. As a result, in 2013, Croatian enterprises used e-government services to a larger extent than companies in Europe as a whole did. On average, in 2013 there were 88% of European enterprises who used some of public administration services (Eurostat [isoc\_bde15ee]). In addition, the Eurostat data show that a larger percentage of Croatian enterprises obtained information and electronic forms from public authorities' websites (the European Union average was 75% and 77%, respectively), used the internet for submitting completed forms (the European Union average was 74%), and offered products or services in public authorities' electronic procurement systems (the European Union average was 13%) than European companies did (Eurostat [isoc\_bde15ee]).

## 5. CONCLUSION

ICT have a great impact on business. In a world dominated by technology, companies need to harness ICT tools to improve their efficiency and effectiveness. Since the use of ICT is strongly associated with the level of economic development, it is necessary to examine the implementation of modern technologies in the business sector. That was the goal of this study. The analysis revealed that the vast majority of Croatian enterprises use computers and the internet for business purposes. Most of Croatian companies have a broadband internet connection. In recent years, there are more and more enterprises with mobile broadband access. The data also show that approximately two-thirds of Croatian enterprises have a website, while less than a third of companies offer and sale products and services over the internet. At the same time, somewhat more than a third of companies have discovered the importance of using social media. According to the available data, companies to a large extent use e-government services. With respect to the interactions between companies and public administration, Croatia is above the European Union average. However, on the basis of the analysed data it can be concluded that the use of ICT in Croatian enterprises is roughly in line with the European average. This means that there is still room for improvement.

In order to accelerate the development of the knowledge and information society, it is necessary to prepare adequate strategies and policies at all levels of governance. Authorities must have at their disposal up-to-date and accurate information to perform this task. Although many data are available, there is still a need for more detailed and specific information on ICT usage. The lack of such data has limited our study. Incompleteness and inconsistency of data also prevent deeper analysis. Therefore it is very important to systematically collect various data on ICT use that can be compared over time and across countries.

## LITERATURE

1. Barba-Sánchez, V., Martínez-Ruiz, M. D. P., Jiménez-Zarco, A. I. (2007). Drivers, Benefits and Challenges of ICT Adoption by Small and Medium Sized Enterprises (SMEs): A Literature Review. *Problems and Perspectives in Management*, 5(1), 103-114.
2. Croatian Bureau of Statistics (2007). *First Release: Usage of Information and Communication Technologies (ICT) in Enterprises, 2007*. No. 2.1.10. Zagreb: Croatian Bureau of Statistics.
3. Croatian Bureau of Statistics (2008). *First Release: Usage of Information and Communication Technologies (ICT) in Enterprises, 2008*. No. 2.1.8. Zagreb: Croatian Bureau of Statistics.
4. Croatian Bureau of Statistics (2009). *First Release: Usage of Information and Communication Technologies (ICT) in Enterprises, 2009*. No. 2.1.8. Zagreb: Croatian Bureau of Statistics.

5. Croatian Bureau of Statistics (2010). *First Release: Usage of Information and Communication Technologies (ICT) in Enterprises, 2010*. No. 2.3.1. Zagreb: Croatian Bureau of Statistics.
6. Croatian Bureau of Statistics (2011). *First Release: Usage of Information and Communication Technologies (ICT) in Enterprises, 2011*. No. 2.3.1. Zagreb: Croatian Bureau of Statistics.
7. Croatian Bureau of Statistics (2012). *First Release: Usage of Information and Communication Technologies (ICT) in Enterprises, 2012*. No. 2.3.1. Zagreb: Croatian Bureau of Statistics.
8. Croatian Bureau of Statistics (2013). *First Release: Usage of Information and Communication Technologies (ICT) in Enterprises, 2013*. No. 2.3.1. Zagreb: Croatian Bureau of Statistics.
9. Croatian Bureau of Statistics (2014). *First Release: Usage of Information and Communication Technologies (ICT) in Enterprises, 2014*. No. 2.3.1. Zagreb: Croatian Bureau of Statistics.
10. Dewan, A. M., Dewan, S. M., Nazmin, S. A. (2009). Use of Information and Communication Technology by State Owned Enterprises in Bangladesh: Comparison between Privatized and Non Privatized SOEs. *International Technology Management Review*, 2(1), 19-31.
11. Eurostat (2014). *Information Society – Enterprises*. Retrieved October 9, 2015, from [http://ec.europa.eu/eurostat/statistics-explained/images/4/4b/Information\\_society\\_-\\_enterprises\\_YB2014\\_rev.xlsx](http://ec.europa.eu/eurostat/statistics-explained/images/4/4b/Information_society_-_enterprises_YB2014_rev.xlsx)
12. Eurostat [isoc\_bde15ee]. *Enterprises Using the Internet for Interacting with Public Authorities*. Retrieved October 7, 2015, from [http://ec.europa.eu/eurostat/product?code=isoc\\_bde15ee&mode=view](http://ec.europa.eu/eurostat/product?code=isoc_bde15ee&mode=view)
13. Eurostat [isoc\_ci\_cd\_en2]. *Enterprises - Computers: Devices and Communication Systems (NACE Rev. 2 Activity)*. Retrieved October 7, 2015, from [http://ec.europa.eu/eurostat/product?code=isoc\\_ci\\_cd\\_en2&mode=view](http://ec.europa.eu/eurostat/product?code=isoc_ci_cd_en2&mode=view)
14. Eurostat [isoc\_ci\_in\_en2]. *Enterprises - Level of Internet Access (NACE Rev. 2 Activity)*. Retrieved October 9, 2015, from [http://ec.europa.eu/eurostat/product?code=isoc\\_ci\\_in\\_en2&mode=view](http://ec.europa.eu/eurostat/product?code=isoc_ci_in_en2&mode=view)
15. Eurostat [isoc\_ci\_it\_en2]. *Enterprises - Type of Connection to the Internet (NACE Rev. 2 Activity)*. Retrieved October 9, 2015, from [http://ec.europa.eu/eurostat/product?code=isoc\\_ci\\_it\\_en2&mode=view](http://ec.europa.eu/eurostat/product?code=isoc_ci_it_en2&mode=view)
16. Frempong, G. (2007). Trends in ICT Usage by Small and Medium Scale Enterprises in Ghana. *ATDF Journal*, 4(1), 3-10.
17. Gottschalk, P. (2007). *Business Dynamics in Information Technology*. Hershey: Idea Group Publishing.
18. Harindranath, G., Dyerson, R., Barnes, D. (2008). ICT Adoption and Use in UK SMEs: A Failure of Initiatives? *The Electronic Journal of Information Systems Evaluation*, 11(2), 91-96.
19. Hashim, J. (2007). Information Communication Technology (ICT) Adoption among SME Owners in Malaysia. *International Journal of Business and Information*, 2(2), 221-240.
20. Kordha, E., Klodiana, G., Vela, F., Rezarta, B. (2013). *ICT Use in Small and Medium Enterprises for Development in Vlora Region*. Paper presented at the International Conference on Economic and Social Studies, Sarajevo, Bosnia and Herzegovina, May 2013.
21. Ladokun, I. O., Osunwole, O. O., Olaoye, B. O. (2013). Information and Communication Technology in Small and Medium Enterprises: Factors Affecting the Adoption and Use of

- ICT in Nigeria. *International Journal of Academic Research in Economics and Management Sciences*, 2(6), 74-84.
22. Mokaya, S. O. (2012). The Adoption of Information and Communication Technology by Small Enterprises in Thika Municipality, Kenya. *International Journal of Business and Social Science*, 3(13), 172-177.
  23. Passerini, K., El Tarabishy, A., Patten, K. (2012). *Information Technology for Small Business: Managing the Digital Enterprise*. Dordrecht: Springer.
  24. Tansey, S. D. (2002). *Business, Information Technology and Society*. London: Routledge.
  25. Žnidaršič, A., Werber, B. (2012). Usage of Information and Communication Technology in Micro Enterprises in the Last Decade. *Organizacija*, 45(2), 87-96.

## **SUSTAINABILITY AS AN OPPORTUNITY TO INCREASE THE GEOGRAPHICAL DIVERSIFICATION OF SLOVENIA'S EXPORTS OF GOODS**

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### **ABSTRACT**

*This paper deals with sustainability as an opportunity to increase the geographical diversification of Slovenia's exports of goods. In recent years, many Slovenian enterprises have increased their sustainability in order to increase their competitiveness in foreign markets. In order to increase the geographical diversification of its exports of goods, Slovenia should promote cooperation between these enterprises in entering new sustainable markets and adopt some other measures, such as the promotion of sustainable innovation. It should also promote sustainable Slovenian enterprises and their products in the aforementioned markets.*

**Keywords:** *exports, Slovenia, sustainability, sustainable entrepreneurship, sustainable innovation.*

### **1. INTRODUCTION**

Competition is an integral part of a modern economy. In order to gain a competitive advantage, enterprises must become better at something than their (main) competitors. Sustainability, e.g., is an important source of (sustainable) competitive advantage (Kopnina and Blewitt 2015). Therefore, in order to increase the competitiveness of Slovenian enterprises, Slovenia should adopt some measures to increase their sustainability.

Sustainability is also an opportunity to increase the value of Slovenia's exports of goods and services. In recent years, many Slovenian enterprises have increased their sustainability in order to also increase their competitiveness in foreign markets. For these enterprises, sustainability has become an integral part of their business. In order to increase the value of its exports of goods to the world, Slovenia should promote sustainability as an important factor of human wellbeing. This will have a positive impact on increasing sustainable entrepreneurship in Slovenia in response to its economic and social crisis. In order to achieve the aforementioned goal, Slovenia should promote (sustainable) start-up enterprises and cooperation among them in entering new (sustainable) markets. It should also promote sustainable solutions to business problems in response to increasing competition for (scarce) resources.

### **2. SUSTAINABILITY AS A SOURCE OF COMPETITIVE ADVANTAGE**

In recent years, sustainability has become an important factor of competition (Caradona 2014). Today, enterprises see their sustainable development as an opportunity to gain a (sustainable) competitive advantage (Blowfield 2013). In order to increase the competitiveness of Slovenian enterprises, Slovenia should promote their sustainable development as a (pre)condition for their

future business success. In addition, it should promote sustainable (business) management in response to market changes.

Market changes are an integral part of a market economy. In order to gain a competitive advantage, enterprises must innovate (Bessant and Tidd 2015). This is especially true for those enterprises that operate in (sustainable) competitive markets. For these enterprises, (sustainable) innovation is a prerequisite for their survival (Pascual, van Kink and Roza Grisales 2011). Slovenia should therefore increase the innovativeness of Slovenian enterprises and promote their innovations. It should also increase their investment in human resources, which are the most important factor in business success (Härtel and Fujimoto 2014). For this reason, Slovenia should promote best practice in human resource management and improve working conditions.

### **3. SUSTAINABLE ENTREPRENEURSHIP AS A FACTOR OF TRANSITION**

Sustainable enterprises are an integral part of a sustainable economy and society (Peterson 2013). They are also an important source of sustainable innovation (Hargadon 2015). Therefore, in order to increase human wellbeing, Slovenia should promote sustainable entrepreneurship and adopt some measures to increase business excellence in Slovenian enterprises. In addition, it should adopt some measures to increase their investment in sustainability. These measures are necessary for Slovenia's transition to a sustainable economy and society. In order to increase sustainable entrepreneurship, Slovenia should promote sustainability as an important source of business opportunities. It should also promote sustainable consumer behaviour.

Today, sustainable consumer behaviour is an important factor in market changes (Reisch and Thøgersen 2015). In order to survive, enterprises must adapt to these changes. However, this is easier said than done and is especially true for small-to-medium-sized enterprises with insufficient resources. In order to increase sustainable entrepreneurship, Slovenia should provide access to finance for sustainable start-up enterprises and adopt some other measures, such as increasing cooperation between Slovenian enterprises in areas such as sustainable innovation.

### **4. SUSTAINABLE INNOVATION AS A FACTOR IN BUSINESS SUCCESS**

In a competitive market, enterprises must innovate so as to remain competitive (Wagner 2012). Innovation is therefore an important factor in their survival. In order to increase the competitiveness of Slovenian enterprises, Slovenia should promote innovation. Sustainable innovation is an important source of (sustainable) competitive advantage (Berkhout 2014). Therefore, in order to increase the competitiveness of Slovenian enterprises, Slovenia should promote sustainable innovation as an important factor in business success. In addition, it should adopt some other measures to increase their competitiveness, such as increasing their cooperation with (other) innovative organizations (universities, university science parks, etc.). This cooperation is necessary to increase innovation excellence in Slovenian enterprises and to achieve some of their other goals.

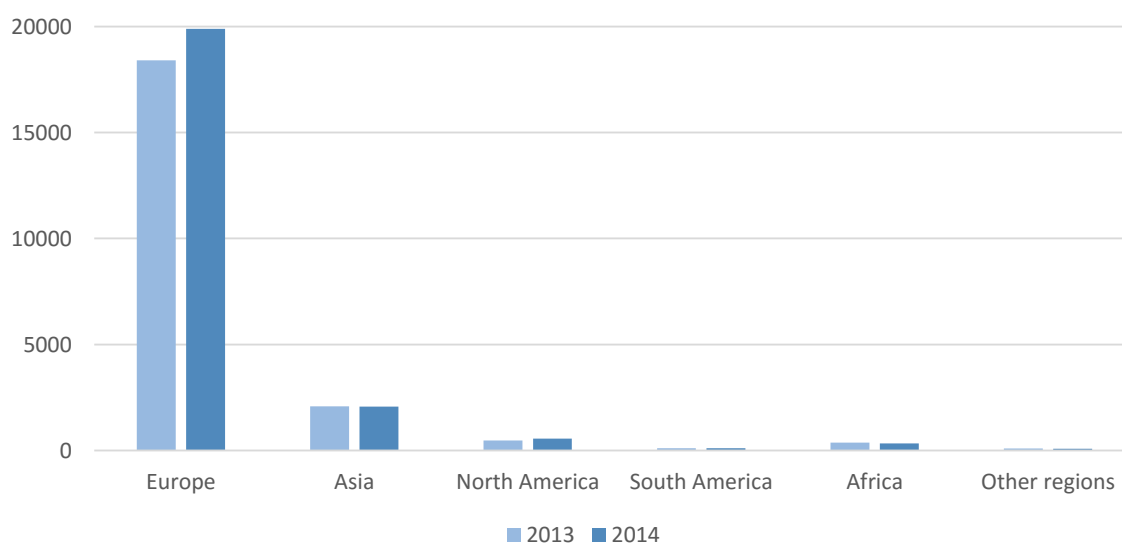
### **5. SLOVENIA'S FOREIGN TRADE IN GOODS**

Slovenia is a small economy and therefore is highly dependent on its trade in goods with the world, mainly Europe. In order to increase the geographical diversification of its exports of goods, Slovenia should promote cooperation between Slovenian enterprises in entering new markets and adopt certain other measures. In 2014, the value of Slovenia's trade in goods with the world amounted to €45,732.7 million (Statistical Office of the Republic of Slovenia 2015), an increase of 4.7% from the previous year. In the same year, the value of Slovenia's exports of goods to the world amounted to €23,049.3 million (Statistical Office of the Republic of



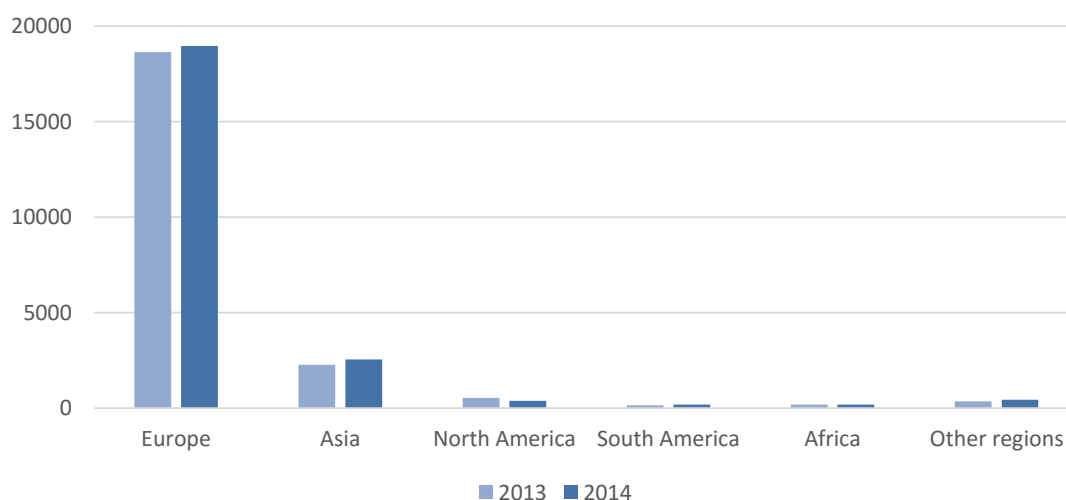
Slovenia 2015), an increase of 7% from the previous year, while the value of Slovenia's imports of goods from the world amounted to €22,683.4 million (Statistical Office of the Republic of Slovenia 2015), an increase of 2.6% from the previous year. As a result, in 2014, Slovenia was a net exporter of goods to the world. Europe is Slovenia's main trading partner. There are many reasons for this, such as low transaction costs. In 2014, the value of Slovenia's trade in goods with Europe amounted to €38,856.8 million (Statistical Office of the Republic of Slovenia 2015), 85% of the value of Slovenia's trade in goods with the world and an increase of 4.9% from the previous year. In the same year, the value of Slovenia's exports of goods to Europe amounted to €19,895.8 million (Figure 1), 86.3% of the value of Slovenia's exports of goods to the world and an increase of 8.1% from the previous year, while the value of Slovenia's imports of goods from Europe amounted to €18,961.0 million (Figure 2), 83.6% of the value of Slovenia's imports of goods from the world and an increase of 1.7% from the previous year. As a result, in 2014, Slovenia was a net exporter of goods to Europe.

**Figure 1: Slovenia's exports of goods by region, 2013–2014, millions €.**



Source: Statistical Office of the Republic of Slovenia (2015).

**Figure 2: Slovenia's imports of goods by region, 2013–2014, millions €.**



Source: Statistical Office of the Republic of Slovenia (2015).

Other regions (Africa, Asia, etc.) are Slovenia's minor trading partners. One reason for this is high transaction costs. In order to increase the value of Slovenia's exports of goods to these regions, Slovenia should increase the effectiveness of its export promotion and adopt some other measures, such as increasing the competitiveness of Slovenian enterprises, e.g., by increasing their sustainability. After all, sustainable enterprises are an important factor of sustainable trade. Therefore, in order to achieve the aforementioned goal, Slovenia should create the right conditions for sustainable business.

## 6. CONCLUSION

Sustainable entrepreneurship is an important factor in human wellbeing. Therefore, in order to achieve some of its (main) goals, Slovenia should promote sustainable entrepreneurship as an important source of sustainable innovation. It should also promote sustainable consumption in response to resource scarcity, which is an important factor of sustainable innovation. In order to increase the competitiveness of Slovenian enterprises, Slovenia should promote best practice in innovation management and adopt some other measures, such as the promotion of sustainable innovation, as a prerequisite for a sustainable future. After all, sustainable innovation is an important factor in sustainable development, which is an important source of business opportunities. In order to increase the geographical diversification of its exports of goods, Slovenia should promote cooperation between Slovenian enterprises and their foreign counterparts in entering new markets, and it should adopt some other measures, such as the promotion of sustainable innovation, as an important factor for sustainable business.

## LITERATURE

1. Berkhout, Frans. 2014. "Sustainable Innovation Management." In *Innovation and Sustainability. The Oxford Handbook of Innovation Management*, edited by Mark Dodgson, David M. Gann, and Nelson Phillips, 290–315. Oxford: Oxford University Press.
2. Bessant, John, and Joe Tidd. 2015. *Innovation and Entrepreneurship. 3<sup>rd</sup> Edition*. Chichester: John Wiley & Sons, Inc.
3. Blowfield, Michael. 2013. *Business and Sustainability*. Oxford: Oxford University Press.
4. Caradona, Jeremy L. 2014. *Sustainability: A History*. Oxford: Oxford University Press.
5. Hargadon, Andrew. 2015. *Sustainable Innovation: Build Your Company's Capacity to Change the World*. Redwood City: Stanford University Press.
6. Härtel, Charmine E. J., and Yuka Fujimoto. 2015. *Human Resource Management. 3<sup>rd</sup> Edition*. Frenchs Forest: Pearson Australia.
7. Kopnina, Helen, and John Blewitt. 2015. *Sustainable Business: Key Issues*. London: Routledge.
8. Pascual, Oriol, Arjen van Klink, and Julio Andrés Roza Grisales. 2011. *Create Impact! Handbook for Sustainable Entrepreneurship*. Rotterdam: Envium.
9. Peterson, Mark. 2013. *Sustainable Enterprise: A Macromarketing Approach*. Thousand Oaks: SAGE Publications.
10. Reisch, Lucia A., and John Thøgersen. 2015. "Research on Sustainable Consumption: Introduction and Overview." In *Handbook of Research on Sustainable Consumption*, edited by Lucia A. Reisch and Thøgersen, 1–16. Cheltenham: Edward Elgar Publishing Ltd.
11. Statistical Office of the Republic of Slovenia. 2015. "Exports and imports by country, Slovenia, cumulative data." Accessed 20 September 2015. [http://pxweb.stat.si/sistat/en/MainTable/tbl\\_2401722](http://pxweb.stat.si/sistat/en/MainTable/tbl_2401722).
12. Vries, Bert J. M. de. 2013. *Sustainability Science*. New York: Cambridge University Press.
13. Wagner, Marcus. 2012. "Entrepreneurship, Innovation and Sustainability: An Introduction and Overview". In *Entrepreneurship, Innovation and Sustainability*, edited by Marcus Wagner, 1–9. Sheffield: Greenleaf Publishing Ltd.

## ANAMORAVA TOURISM RESOURCES IN THE FUNCTION OF DEVELOPMENT OF HEALTH TOURISM

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### **ABSTRACT**

*Tourism sector since the existence of human society has been and still is nowadays important sector of socio-economic and integral part of society. Seeing it from the economic aspect it is day by day more and more turning into the carrier sector of economic development, impact and its importance for today's contemporary society are also reflected in other segments of the life of society, local, regional level and beyond.*

*The impacts of tourism are noticed in education, culture, science, employment and above all in health where through the development of health tourism in addition to providing treatment, rehabilitation, rest and recreation etc., increasing the level of sectorial development of tourism has enabled the recovery of certain diseases using medical tourism resources for the development of health tourism.*

*Touristic Ana Morava region with its tourist available resources offers numerous opportunities for the development of health tourism.*

*Tourism resources of the region in question for the scientific work is focused and it is the object of this scientific research provide good opportunities for a diversified offer for health tourism development as an integral part of the tourist offer of Kosovo.*

*Through tourism resources for the development of health tourism resort the Ana Morava region has become well known not only within the national but also based on international trends of increasing tourism demands, local and international for this kind of tourism through thermal center as it is the Klllokot, Dobërqan, Ugljare and Peja spa.*

**Keywords:** *Human Resources, Hospitality, Management, Motivation, Tourism*

### **1. INTRODUCTION**

Kosovo, with its own natural heritage as well as cultural heritage tourism is likely to offer the market a diversified tourist offer to certain types of tourism and an important part of this offer certainly is health tourism.

Seen in terms of tourist regions, Kosovo tourism resources are divided into five tourist regions among which also ranked the Ana Morava tourist region, which is known not only in the local tourism market but also beyond.

Through tourism thermal resources for development of health tourism the region of Ana Morava has become known not only within the national but also based on international trends of increasing tourism demand, local and international for this kind of tourism through the centers and thermal resources like Klllokotit Spa, Nana Naile Spa, Dobërqanit baths and thermal resources of Ugljare.

Development of tourism besides available tourism resources requires the coordination of activities of relevant actors and with no doubt dominant role play the capital investments which so far are not to a satisfactory level based on the opportunities that the Anamorava region offers and demands of tourists for this kind of tourism.

## **2. PURPOSE OF THE PAPERWORK**

The purpose of this paper is to study and expose the tourism resources of the tourist region of Ana Morava that enable development of health tourism in this region in particular, and in Kosovo in general.

The work will enable to better recognize the tourist resources of this region and introduction with them in order to develop health tourism in particular the tourism sector in general, through thermal springs known as the Klllokot spa, Dobërçan, Ugljare etc. and introduction with the elements of tourism products for this kind of tourism.

In function and purpose of the paperwork there will be given assumptions about thermal springs which are and will be in the future for the development of health tourism, which would ensure health spas cited above through the questionnaire and the conclusions drawn will enable the realization of the purpose of this paper.

## **3. OBJECTIVES OF THE PAPER**

In order to fulfill the purpose of the study, there have been compiled targets which aim to fulfill the purpose of this study, which are:

- Introduction of theoretical aspects regarding the management and development of thermal springs in this resort region;
- Defining the methodology of the study;
- Analysis of the questionnaires, of the tourist resources in this tourist region;
- Drawing the conclusions;
- The study will be carried out specifically through the analysis and identification of strengths and weaknesses, of tourism resources that will be in the function of the development of health tourism.

## **4. PURPOSE AND THE STUDY OBJECTIVES**

The study aims to analyse and to familiarize the formulation and implementation of human resource management in health tourism with particular emphasis in Klllokot Spa. In order to achieve this goal, the study will provide a response in the following research questions:

- What are the determinants for the development of health tourism?
- Does a policy-maker utilization of thermal resources play role on development of health tourism?
- Is there coordination of activities between the relevant stakeholders in the development of health tourism?
- Is the capacity of tourism resources for the development of health tourism studied in the tourist region of Ana Morava?

**H1. The thermal springs are closely related to the development of health tourism.**

## **5. REVIEW OF LITERATURE**

Review of literature poses quite an important component in the preparation of the scientific work, because, besides providing new interpretations of the opposing view there is also observed by various thinkers on certain issues. Literature review will increase the knowledge on the topic, identify gaps in literature and will continue the path of the construction of new theories on existing data (Bourner, 2006).

## **6. HISTORY OF HEALTH TOURISM**

Health tourism traditionally consists in the use of water with healing properties in different ways. This is corroborated by archaeological exploration, literary evidence, scientific and many epigraphs (Federterme, 2009).

Health care has been one of the basic motives for trips that were realized by the old Greeks and Romans. In Ancient Greece existed,, public bathhouses " and private ones. Public baths were built in the open, near buildings, while offering services to users who paid reasonable prices (Ucomo, 2004).

Not coincidentally near thermal springs were built important temples as the Olympus and Apollo at Delphi. Hippocrates himself in his work "USO dei liquidi" encouraged the protection of mineral resources/springs.

In ancient times, the use of thermal waters was an element of lifestyle and customs of the Romans. In Rome began to be used in Greek term "therma- thermos", which means "hot". This term indicated mineral thermal waters with healing properties of rehabilitation in almost all kinds of spas. Public baths appeared in Rome during the second century BC, but began to be used to cure the body in III century BC. Romans replaced the Greek model,, simple baths "with a complex system of services (Ucomo, 2004)..

The healing properties of thermal waters in the 1300s began to be reassessed due to the achievements in the development of medicine since then begin to highlight the importance of their healing values. In this period it was also determined the role of "medical advisers" in health spas services (Battilani, 2009).

### **6.1. Theoretical aspects and application in tourism**

Tourism as a scientific discipline as well as the economic sector appears complex be it in a theoretical or practical in its practical application when studying it. In today's modern time it is considered exhorting factor with multidimensional effects economic, social, cultural, environmental, etc.

Tourism has to do with the movement of people from their permanent residence to temporary residence in another country, where they stay at least one night, for leisure or for work<sup>59</sup>.

This is one of the definitions of modern tourism, which includes all the elements of his motivation place of departure, displacement, length of stay, return, etc.

Health tourism has to do with a category of people who realize tours with the aim of healing of any disease, improving various anomalies, namely for medical purposes in general.

## **7. THERMAL SPRINGS IN ANA MORAVA, HISTORY**

Socially owned enterprise "Kllokot Spa" in Klokot was founded in February 1953. Magma is closer to the earth's surface which releases heat and hot water. Mineral waters in Kllokot Spa exits the Earth's surface in the range from 31-37 Celsius degree. Kllokot spas lays in a good geographical position of the Upper Morava extends from the top of the Morava River to Uglar. Klokot spa, as medical and rehabilitation center works since 1981. It is visited and are cured many local and foreigners. At the premises of the center there are inexhaustible sources of mineral water with temperature 37 ° C and healing mud known as Kllokot Peloida. Within this working center works a team of specialist doctors and physiotherapists with years of experience. Besides indoor and outdoor swimming pools patients may enjoy physiotherapy service with contemporary treatment.

This settlement is now located between two major centers of Kosovo such as Gjilan and Ferizaj in almost equal distance 20 Km. Geo-morphological structure and other features of the physical and geographical location, namely the relief, we see various forms of relief, flattened area fields that are surrounded by mountains. The altitude of this area is 479 meters and at it dominates the Mediterranean clime.

Besides providing services until now mainly focused on curative tourism, with its premises that there are about 10 Ha, in the future the Spa its objective is to expand the capacity of

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<sup>59</sup> World tourism organization (WTO)

accommodation and increasing the range of services that will be levied in order to fulfill the requests for other forms of tourism with special emphasis on tourism for rest and recreation and family tourism.

In addition of the Klokot Spa operation, its business activities for health tourism also exercised by the other entity Nana Naile Spa, which offers health tourism services since after the war.

These two (thermal centers) have over 2600 beds in order to meet tourism demands for health tourism. Besides these two centers that are curative in Klokot in the resort of Ana Morava there are well known also other thermal spring spas as the one of Uglar and Dobërqani that with their healing virtues have become known to local and international tourist clientele.

## 8. TOURISM RESOURCES

Tourism development is also supported by human resources. In a given space tourist offer is intact, if combined natural and human resources. In Spa tourism it is also important not only springs with their health values, but also material and spiritual cultural heritage of curative areas. These elements favor longer stay of visitors to curative centers.

Kosovo has good potential to develop this kind of tourism and to appear in the local and regional market, and wider with competitive offer for this kind of tourism undoubtedly found in the tourist region of Ana Morava.

In the development of spa tourism it is also important the social, economic (human potential) culture, of the community area which welcomes visitors such as:

- Infrastructure, host hotel structures and their history;
- The specialized staff in customer service;
- The educational level in order to develop spa tourism;
- The impact of the other branches of the economy in the service of spa tourism;
- Level of local interventions to ensure sustainable economic development, of spa areas.

At a time when the global economy is in a period full change efforts for orientation for sustainable economic development, have advantages to offer new solutions for decision-makers, who conducted research and have prompted debate on sustainable development. Economic development which 'offers citizens a development which could meet the needs of the present, but without damaging the capacity to meet their needs for future generations. This new economic thinking has its own economic priority which puts citizens at the center of attention for the political decision makers. To get to the sustainable development, the carriers of this development are undoubtedly human resources human factor, as in any other sector as well as in the development of health tourism

Exactly, perceived environmental crises and global response in the 1960s and 1970s were the origin of the concept of sustainable development. But the cumulative effects of population growth, combined with the driving force for better economic conditions added by the global science and technology, they exercise pressure on limited resources. In order to correct these problems, it was required a real conception of the situation, fundamental change in the style of living.

## 9. METODOLOGY

During the drafting of the paper are used quantitative methods of data collection, ie a questionnaire was used for data collection, through which have been made comparison of different variables used to test the set hypothesis.

Another method used in this paper is descriptive method through which is described health tourism. The data collected are processed through Excel. The survey was conducted in August-September 2015.

## 10. RESULTS ANALYSES

To collect the data, it was prepared and distributed a questionnaire for 73 respondents. The answer is taken from questionnaires distributed. The questionnaire contained six questions in the system of closed questions.

Nr.	Questions / Answers	yes	no	Don't know	Total
1	Are there enough resources of tourist areas in Ana Morava region for the development of health tourism?	43	11	19	73
2	Is it in a good level the development of health tourism in the tourist region of Ana Morava?	43	18	12	73
3	Do you see the development of health tourism important factor for the development of tourism for the future	52	18	3	73
4	Are you satisfied with the level of services on health tourism?	59	14		73

Sources: Authors, Ramadani & Zuzaku (2015)

From the data found through the survey shows that estimates for the thermal springs at the resort on all questions asked respondents evaluate positively the question of the importance of the development of health tourism in the development of tourism the answer is positive from the largest number of respondents as it is shown in tabular and graphic statement presented in the paper.

## 11. CONSLUSION

By findings through research conducted can be reached at the following conclusions and recommendations:

- Based on the literature review indicate that the sources are important for the development of health tourism.
- Findings from the Survey indicate that resort of Ana Morava region has significant thermal sources that enable the development of health tourism.
- The research made has enabled confirmation of the hypotheses set out in this paper that the management of human resources enables the development of health tourism.

Recomandations:

- Management of the thermal centers focused even more on care for natural resources and with the aim of raising the level of development of health tourism.
- Thermal centers have sufficient space to expand the range of services in health tourism.
- Relevant actors must coordinate institutional activities in order to increase the development of health tourism.

## LITERATURE

1. Bournier .T, The Reearch Process 1996 Lonedr, Greenfield.T & Arnold
2. Battilani P., Vacanze di pochi, vacanze di tutti, Bologna 2009
3. Halil Bajrami Halil Bajrami Tourism in Kosovo and its sustainable development, disertacion, Tiranë 2015.
4. Federterme, Federazione Italiana delle industrie termali e delle acque curative termali, Itali 2009. (<http://www.federterme.it>)
5. Ucomo E., Il turismo termale in Campagna tra ottocento e novecento, Itali 2004,

6. World Tourism Organization (WTO).
7. Documents of management of thermal centres
8. <http://www.banjakllokotit.com>
9. Kosovo Statistics Agency. (2014). Revenue and employment of businesses based on NACE 1 for the year 2010-2013. Prishtina: ASK.
10. Gorica, K. (2003). Trade marketing albanian touristic marketing –economic necessity. Tiran: Morava.
11. Kruse, K. E. (2012). Employee Engagement 2.0: How to Motivate Your Team for High Performance (A Real-World Guide for Busy Managers). United States of America: The Kruse Group.
12. Mazreku, I. (2010). Management bases . Prishtina: Dispenc.
13. Millaku, B. (2008). Basic determinants and prospects of tourism development in Kosovo Logos, 11-19.
14. Ministry of Trade and Industry. (2014). Categorization register of accomodating units. Prishtina: MTI.
15. Pesonen, J. (2013). Developing Market Segmentation in Tourism: Insights from a Finnish Rural Tourism Study. Finland: Publications of the University of Eastern Finland.
16. Zendeli, M. (2008). Attraction, "Link" and retaining of the personnel at the hotel enterprises. Logos, 99-113.



## NON-HARMONISED MANDATORY STANDARDS AS NON-TARIFF BARRIERS: EXPERIENCE FROM JAPANESE IMPORTS

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### ABSTRACT

*The WTO TBT agreement has been promoting to harmonise national standards with relevant international standards worldwide since 1995. Such a harmonisation of the standards may reduce trade costs stem from the differences between national standards across countries, and then would facilitate international trade. Although the standards are voluntary by definition, some national standards are mandatory since mandatory statutes in home country require to adopt one or more specific national standards for products. Accordingly, if national standards are mandatory and non-harmonised, they function as non-tariff barriers to trade in the home country.*

*In this paper, we empirically examine the effects of the standards harmonisation and the mandatory standards on international trade flows, especially the emergence of newly imported products in Japan. Our results suggest that non-harmonised national standards with mandatory statutes deter new entrants from foreign countries to home market. This empirical study is not possible without our new concordance between international standards and HS 6-digit products.*

**Keywords:** *Harmonisation, International Standards, International trade, Mandatory statutes*

### 1. INTRODUCTION

The member countries of the World Trade Organisation (WTO) has been required to adopt international standards for an internationally traded product if an relevant international standard exists for it since the Agreement on Technical Barriers to Trade (TBT) of the WTO has come in to effect in 1995. In principle, national standards in each member country have been required to be harmonised with international standards. Thus, the standards harmonisation is expected to have significantly accelerated among the member countries under the WTO TBT agreement. Consequently, international trade would be facilitated by the reduction of the trade costs resulting from non-harmonised national standards across countries. According to Mangelsdorf (2011), which is one of the pioneering works in the research on the effects of standards harmonisation on international trade, internationally harmonised national standards have positive impact on the volume of international trade. He has empirically analysed the effects of the harmonisation of Chinese national standards with international standards on Chinese export and import with European Union.

Although the WTO TBT agreement has been promoting the harmonisation of standards worldwide, it is still far from completion. For example, according to the data on the degree of harmonisation of Japanese national standards collected by Japanese Standards Association (JSA)<sup>60</sup>, Japanese national standards - Japanese Industrial Standards (JIS) - has not been entirely harmonised with international standards by 2014.

In this paper, we will investigate the effects of both non-harmonised and harmonised Japanese national standards on Japanese imports, especially new foreign products' entrances to Japanese market through import. First, this paper empirically examines the effects of

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<sup>60</sup> JSA is national standards body in Japan

harmonisation of national standards with international standards promoted by the WTO TBT agreement on an expansion of international trade between countries since the standards harmonisation decreases the entrance costs of foreign producers. In order to evaluate the expansion of international trade we will identify new import entrants<sup>61</sup> to home market at HS 6-digit product level. Second, we will take the effects of mandatory statutes<sup>62</sup> on international trade into consideration. The mandatory statutes in home country force all domestic and foreign producers to cite one or more specific national standards if they plan to sell their products in home country. Thus, such national standards is considered to be mandatory. For this reason, mandatory standards would increase entrance costs of foreign producer. In addition, if a mandatory statute forces to cite a non-harmonised national standard, then it would hinder international trade in goods since such differences between home and foreign national standards will clearly impose the costs to adjust to home country's national standards. Hence, non-harmonised mandatory standards would increase entrance costs of new entrants to home market even more.

The reminder of this paper is structured as follows. In Section 2 we review the empirical preceding papers regarding the effects of standardisation and international trade flows. In Section 3 we develop our empirical model to analyse the effects of harmonisation of Japanese national standards with international standards on Japanese imports, especially newly imported products to Japanese market, and will provide some results from our empirical analysis. Then, we will conclude our empirical analysis results in Section 4.

## **2. PRECEDING STUDIES IN INTERNATIONAL STANDARDS AND INTERNATIONAL TRADE**

We will review the results of preceding studies regarding the effects of standardisation on international trade flows in both theoretical and empirical analyses. There are two perspectives toward the effects of standardisation on international trade. One is to consider standards as a trade barrier. This view indicates that the standardisation has a negative impact on international trade. The other is to consider standardisation as catalyst of international trade in that standards have a positive impact on international trade.

Blind (2004) summarised that the theoretical discussions on standardisation can be linked with a wide range of topics in economics. Similarly, Swann (2010a, b) summarised that the empirical studies about standardisation are conducted from a board set of perspectives. In this Section 2, we will focus on the discussions regarding the effects of standardisation on international trade.

As in documented in Blind (2004), standardisation may affect international trade flow positively since it would reduce transaction costs, such as search costs and information cost, between exporters and importers. For example, Jones and Hudson (1996) theorised that the standardisation of products might reduce the costs of uncertainty attributed to a buyer's product quality examination. They pointed out that one of the important effects of standardisation is to reduce a variation in product quality among varieties. For instance, if standardisation imposes a minimum product quality, then buyer can search out its suitable product within narrower range of product quality, compared with the range without the standards. Therefore, standardisation may help to reduce the search costs of buyers. Butter et al. (2007) also indicates that standards have a function to reduce transaction costs, especially related to value-chains, since it tends to require more coordination activities between production stages located in foreign countries. As discussed by them, when buyers and sellers

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<sup>61</sup> The measurement method of the new import entrants in this paper will be explained later in Section 3.

<sup>62</sup> International standards and national standards are generally voluntary unless mandatory statutes or compulsory laws require producers to cite specific standards. In this paper we call the standards which are required to cite by mandatory statutes as mandatory standards.

deal with standardised products, they only need to negotiate price and delivery conditions with each other. It means that they can complete their transaction with smaller transaction costs compared with the transaction costs of non-standardised products. Similarly, Ijiri et al. (2013), Moenius (2006), Portugal-Perez et al. (2009), and Shepherd (2007) find that, generally, standardisation affects trade flows positively.

On the other hand, only a few papers have empirically examined the effects of harmonisation of standards across countries on international trade flows so far. For example, Czubala et al. (2009) examine the impact of EU standards on African textiles and clothing exports to European economies. They find that non-harmonised standards reduce exports of African products in the industries. Similarly, Mangelsdorf (2011) studied the effects of the harmonisation of Chinese national standards with international standards on Chinese export and import with European Union. He reported that the internationally harmonised Chinese standards for products in 36 industries have increased the volume of international trade between China and EU. As documented in these previous papers, non-harmonised national standards are considered to be a trade deterrent factor, whereas international standards and harmonised national standards are considered to be a trade-facilitating factor.

### 3. EMPIRICAL ANALYSIS AND RESULTS

Our empirical analysis strategy and the data we use in this paper are summarised as follows.

#### 3.1 Hypothesis

Similar to the preceding papers on standardisation, our first hypothesis is that international standards decrease trade costs, such as transaction costs, adjustment costs and so on, since in principle international standards require to use the same standards across countries for internationally traded products. Hence, a publication of international standards to products may increase international trade flows by inducing new entrants from foreign countries into home market. For example, in case of an increase in trade volume of home market, there are two ways to increase it. One is new entrants from existing trade partner countries, and the other is new entrants from new trade partner countries. We will decompose the increase of trade volume into such two factors.

In order to distinguish between the two types of new foreign entrants into home market, we measure new entrants from new partner countries in HS 6-digit products. Here, we call the new entrants as Newly Traded Products (NTPs). As we focus on Japanese imports in this paper, it is, of course, Newly Imported Products (NIPs) in Japan. This NIPs is measured in the following method. NIPs has a binary value, either 0 or 1. We put 1 in year  $t$  in the case that there is no import value of product  $k$  from country  $i$  in year  $t-1$  and positive import value of that product from country  $i$  in year  $t$ ,  $t+1$  and  $t+2$  (i.e., three years in row), otherwise we put 0 in year  $t$ .

Our interest is whether such emergences of NIPs in Japan have been caused by the international standardisation or not. Especially, the emergence of NIPs from a new trade partner in Japan means an increase in the number of import partners of Japan for a traded product. It is different from a change in the size of trade value in that trade value changes do not necessarily mean the increase of trade partners.

Our second hypothesis is that mandatory statutes (compulsory law) require a producer to conform specific standards for its products. If a mandatory statute, such as Building Standards Act, Air Pollution Control Act, Fire Service Act and so on, orders to cite a non-harmonised national standard, it would exert a negative impact on international trade as a trade barrier. Since non-harmonised national standards are not matched with a relevant international standard if exists, foreign producers have to adjust their products in order to fulfil national standards cited by a mandatory statute in export destination country by paying extra trade

costs. Hence, non-harmonised standards may be a trade barrier to foreign products that cite different standards from national standards. We will empirically test these two hypotheses in next section.

### 3.2 JSA Standards Data

JIS (Japanese Industrial Standards) is Japanese national standards for industrial and mining products. Its legal basis is the Japanese Standards Law. The purpose of this law is to promote industrial standardisation by establishing appropriate industrial national standards in Japan. The number of the existing published JIS is 10,525 in March 2014.

As mentioned previously, the WTO TBT requires its member countries to harmonise its national standards with international standards in order to reduce non-tariff barriers stem from differences between national standards and international standards if relevant international standards exist. Thus, it is important to examine whether the standard harmonisation have reduced trade barriers or not. However, it is usually not publicly accessible to national standards database which contains the information regarding the standards harmonisation.

We have successfully accessed to the database of JIS compiled by Japan Standards Association (JSA). This database contains the detail information of each JIS standard, such as name of JIS, publication date, JIS classification code, relevant ICS codes, corresponding mandatory statutes or compulsory provisions and so on. The most important one for this paper is the information about status of harmonisation of each Japanese national standard with international standards, i.e., ISO/IEC standards.

### 3.3 Concordance between products and standards

Ijiri, Yamano and Miao (2013) use their original concordance between ICS and HS 6-digit products for its analysis on the effects of international standardisation on bilateral trade flows between 57 countries including both OECD and selected non-OECD countries. They use the concordance developed by Ijiri and Haneda (2012). The concordance covers all HS 6-digit products and shows the matched results between HS 6-digit product and 5 or 7-digit ICS codes. This is the only existing concordance between full HS 6-digit products and ICS. However, it is not the concordance between HS 6-digit products and each ISO/IEC standard. This is one of the shortcomings of their concordance.

We have tried to make up for the shortcoming of Ijiri and Haneda's concordance by developing a new concordance between each HS 6-digit product and ISO/IEC standard<sup>63</sup>. It does not cover all HS products, but covers HS products in ISIC 29 to ISIC 35 industry. Using the name, short explanation and ICS code of each ISO/IEC standard, we have judged relevancy of each ISO/IEC standard and one or more HS 6-digit products, and then mapped the most relevant HS 6-digit products with ISO/IEC standards. We also identify the year of product-type switch from Non-Standardised products to Standardised product by considering the publication year of each international standard. If more than two international standards are mapped with a HS 6-digit product, we use the publication year of the first international standards. We are able to know the year of becoming a Standardised product using our new concordance. The concordance covers 1196 HS 6-digit products in the industries from ISIC 29 to ISIC 35. We also collect End-use category for those products from The OECD STAN Bilateral Trade Database by Industry and End-Use (BTDIxE).

Based on the JSA database, the Japanese Industrial Standards (JIS) is possibly to categorised into the following group by using our concordance between ISO and HS, since the JSA data contains the corresponding ISO/IEC standards codes to each JIS if available (unfortunately not all JIS have its corresponding ISO/IE C standards codes). The results of mapped JIS with ISO/IEC standards are reported in Table 1.

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<sup>63</sup> Ijiri and Haneda (2015) documents the detailed information of this new concordance.

*Table 1: The results of Harmonisation of JIS with ISO/IEC standards by JIS classification codes*

Code	Description	Number				Share		
		Total	IDT	MOD	NEQ	IDT	MOD	NEQ
A	Civil Engineering and Architecture	920	72	127	1	8%	14%	0%
B	Mechanical Engineering	2613	466	638	40	18%	24%	2%
C	Electronic and Electrical Engineering	2664	650	698	71	24%	26%	3%
D	Automotive Engineering	555	37	151	5	7%	27%	1%
E	Railway Engineering	319	2	41	1	1%	13%	0%
F	Shipbuilding	873	65	56	14	7%	6%	2%
G	Ferrous Materials and Metallurgy	628	54	184	7	9%	29%	1%
H	Nonferrous Materials and Metallurgy	723	18	135	4	2%	19%	1%
K	Chemical Engineering	3269	340	651	15	10%	20%	0%
L	Textile Engineering	654	8	114	9	1%	17%	1%
M	Mining	295	6	70	4	2%	24%	1%
P	Pulp and Paper	145	17	54	0	12%	37%	0%
Q	Management System	99	79	6	0	80%	6%	0%
R	Ceramics	548	6	106	0	1%	19%	0%
S	Domestic Wares	489	13	16	3	3%	3%	1%
T	Medical Equipment and Safety Appliances	710	68	250	16	10%	35%	2%
W	Aircraft and Aviation	403	60	1	0	15%	0%	0%
X	Information Processing	771	460	145	4	60%	19%	1%
Z	Miscellaneous	1432	199	278	19	14%	19%	1%

*Source: JSA Database*

As shown in Table 1, the degrees of harmonisation of JIS with international standards are complicated. JSA categories the degrees of harmonisation into three groups: IDT, MOD, and NEQ. IDT indicates that JIS and international standards are identical (harmonised). MOD indicates that JIS is modified from its corresponding international standards and is not fully harmonised with it. And, NEQ indicates that JIS and international standards are not identical with each other. In addition, there should be some JIS that do not have any corresponding international standards. This type of JIS is also considered as non-harmonised national standards.

Table 1 shows the summary of JIS's harmonisation degree. The classification code for JIS is one alphabet and 4 digit numerical number. The number of JIS published is 18110, which also includes branch standards. According to Table 1, 14.5% of JIS are IDT, while MOD and NEQ are 20.5% and 1.2% of JIS, respectively. The reminder is considered as non-harmonised and no corresponding international standards.

Based on these categories, we decide a degree of harmonisation of each HS 6-digit product in ISIC 29 to 35 industries. In fact, most of JIS have multiple corresponding international standards. Hence, it is not straightforward for us to decide each HS 6-digit product's degree of harmonisation. In this paper we use the following definition of degrees of harmonisation in order to decide a product's category. A harmonised Standardised product has only corresponding JIS standards which are categorised as IDT, while a Non-harmonised Standardised product has a combination of some corresponding JIS standards which are categorised as at least two of these three categories; IDT, MOD and NEQ.

Table 2: The degree of standardisation of the HS products in ISIC29 to 35 industries from 1997 to 2011

Stock of ISO/IEC standards																
		ISO/IEC														
ISIC	#HS	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
29	541	3,893	4,272	4,668	5,029	5,461	6,019	6,623	7,549	8,332	9,145	9,924	11,464	12,480	13,308	14,164
30	47	364	382	434	511	532	535	547	564	610	630	654	677	714	744	782
31	134	1,191	1,262	1,411	1,507	1,647	1,829	1,980	2,152	2,450	2,682	2,921	3,162	3,483	3,748	4,058
32	101	2,015	2,074	2,190	2,272	2,360	2,463	2,613	2,693	2,809	2,946	3,096	3,266	3,339	3,481	3,666
33	226	2,439	2,792	2,989	3,423	3,773	4,176	4,658	5,002	5,625	6,214	6,755	7,334	7,885	8,379	8,956
34	61	409	454	479	508	565	606	673	736	841	976	1,056	1,134	1,196	1,260	1,351
35	86	928	1,102	1,124	1,217	1,305	1,377	1,396	1,431	1,688	1,794	1,894	1,985	2,076	2,268	2,370
Average of ISO/IEC standards																
		ISO/IEC														
ISIC	#HS	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
29	541	7.20	7.90	8.63	9.30	10.09	11.13	12.24	13.95	15.40	16.90	18.34	21.19	23.07	24.60	26.18
30	47	7.74	8.13	9.23	10.87	11.32	11.38	11.64	12.00	12.98	13.40	13.91	14.40	15.19	15.83	16.64
31	134	8.89	9.42	10.53	11.25	12.29	13.65	14.78	16.06	18.28	20.01	21.80	23.60	25.99	27.97	30.28
32	101	19.95	20.53	21.68	22.50	23.37	24.39	25.87	26.66	27.81	29.17	30.65	32.34	33.06	34.47	36.30
33	226	10.79	12.35	13.23	15.15	16.69	18.48	20.61	22.13	24.89	27.50	29.89	32.45	34.89	37.08	39.63
34	61	6.70	7.44	7.85	8.33	9.26	9.93	11.03	12.07	13.79	16.00	17.31	18.59	19.61	20.66	22.15
35	86	10.79	12.81	13.07	14.15	15.17	16.01	16.23	16.64	19.63	20.86	22.02	23.08	24.14	26.37	27.56
Flow of ISO/IEC standards																
		ISO/IEC														
ISIC	#HS	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
29	541	456	379	396	361	432	558	604	926	783	813	779	1,540	1,016	828	856
30	47	23	18	52	77	21	3	12	17	46	20	24	23	37	30	38
31	134	194	71	149	96	140	182	151	172	298	232	239	241	321	265	310
32	101	138	59	116	82	88	103	150	80	116	137	150	170	73	142	185
33	226	427	353	197	434	350	403	482	344	623	589	541	579	551	494	577
34	61	44	45	25	29	57	41	67	63	105	135	80	78	62	64	91
35	86	113	174	22	93	88	72	19	35	257	106	100	91	91	192	102

Source: Author's calculation using the concordance (Ijiri and Haneda, 2015) and JSA Database

Table 2 shows, in the upper part of the table, the total number of the published international standards up to the year from 1997 to 2011 by each mapped ISIC 2-digit industry and the number of HS 6-digit products in the industry. In the middle part of the table, the average number of published international standards is shown. The bottom of the table shows that the number of the published intentional standards in each year. According to Table 2, the total number of the published international standard in ISIC 29 is the largest among the other industries in 2011. However, the largest average number of the published standards - the number of published standards per product- is in ISIC 33 in 2011.

### 3.4 Some facts of Japanese imports from 1996 to 2013

We will summarise some results of the measurement of Newly Imported Products in Japan. Figure1 shows the number of import partners in Japan each year from 1996 to 2013 for all ISIC industries and the selected ISIC 29-35 industries. In this period the number of Japanese import partners in all ISIC has been slightly increased but fluctuated between 192 and 209 countries. The number of partners in Japanese imports in ISIC29-35 have been increased from 147 to 182 countries by 2006 and then decreased to 153 countries in 2012. Figure 2 indicates that NIPs in Japan by end-use category each year has kept declining from 1999 to 2009. NIPs in Intermediates goods is the largest among End-use categories, followed by Household consumption (CONS) and Capital goods (CAP). As shown in Figure 3, the share of import value of NIPs in total import each year has been fluctuated from 0.10% to 2.06%, and is relatively smaller in recent years. According to these measurement results of NIPs in Japan, we can mention that the emergence of NIPs has become relatively less since the mid-2000s.

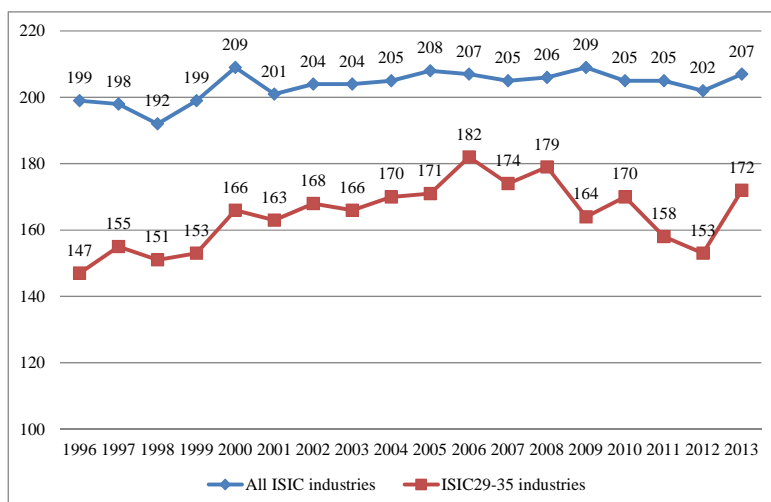


Figure 1: The number of Japanese Import Partners  
Source: Author's calculation using UN Comtrade Database

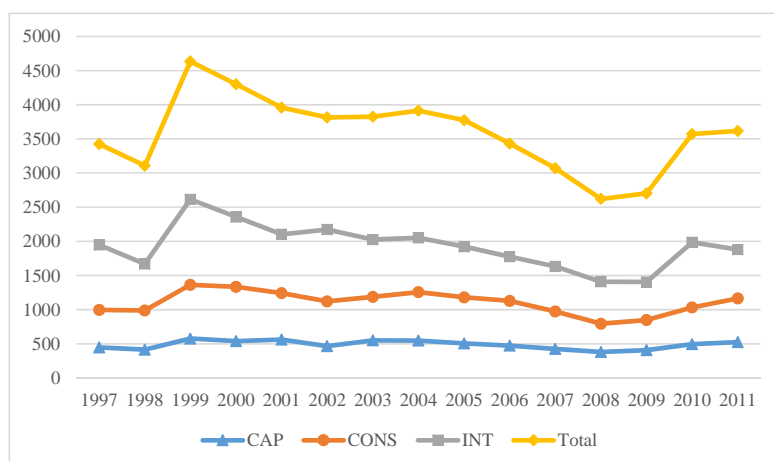


Figure 2: The number of Newly Imported Products in Japan by End-use category  
Source: Author's calculation using UN Comtrade Database

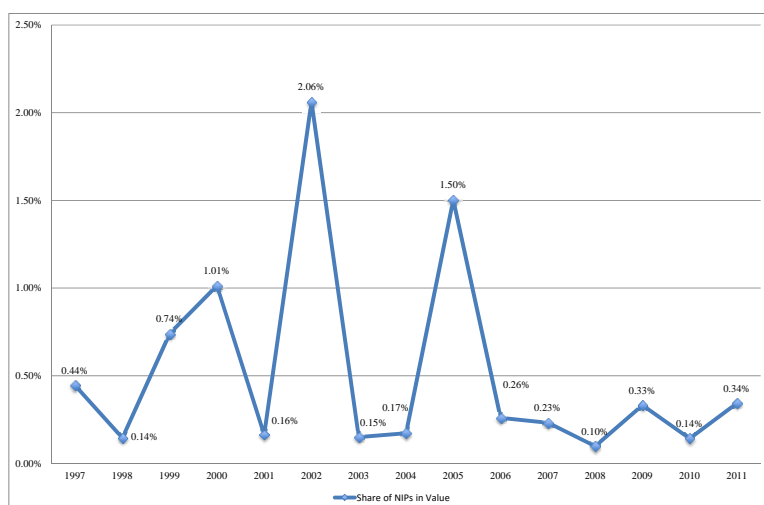


Figure 3: The share of NIPs in Total Import Value in Japan  
Source: Author's calculation using UN Comtrade Database

### 3.5 Empirical Model

Our estimation strategy is summarised as follows. We use Newly Imported Products as a measure of the changes in international trade flow in Japan, emerged as the effects of harmonisation of JIS standards. The variable of Newly Imported Products (NIPs) is measured as explained in previous section. NIPs has binary value, either 0 or 1. We use Difference-In-Difference (DID) method for the analysis of harmonisation effects on import. This method allows us to estimate whether there is a difference between a treatment group and a control group in the ex-post of an event. In this model, the treatment group is harmonised Standardised products, while the control group is the rest of the observations in the dataset. The event in this model is the publication of international standards. That is, we estimate whether there is a difference in the emergence of newly imported products between harmonised Standardised products and Non-harmonised-Standardised products in one year after the standards publication.

Following the discussion in Hellevik (2007), we choose Linear Probability Model (LPM) as our estimation method.

$$NIP_{ij,t}^k = b_0 + b_1 \ln Y_{i,t} + b_2 \ln t_{ij,t} + b_3 Treat_t^k + b_4 Year_t + b_5 TYear_t + e_{ij,t}^k \quad (1)$$

Y: GDP of country i (j for Japan, and i for partner country)

$\tau$ : Trade cost

Treat: Treatment group dummy (Treatment=1, otherwise 0)

Year: Year dummy for standards publication

TYear: Interaction term of Treat and Year

We have estimated the equation (1) for each ISIC 29-35 industry by each End-use category, Capital goods (CAP), Intermediates goods (INT) and Household consumption (COMP) in the period from 1997 to 2011.

### 3.6 Estimation Results

Our estimation results are shown in Table 3 and will be summarised as follows. We do not report all of the estimation results, but only report some important ones. Table 4 reports the selected estimation results in ISIC 29 industry for Intermediates goods and Capital goods, respectively, with the standards published in 2005. The observations in the dataset are selected by the degrees of harmonisation: Non-harmonised Standardised products and harmonised Standardised products. Model (1) and (2) are for Non-harmonised Standardised products, while Model (3) and (4) are for harmonised Standardised products. All of these models contain products that are controlled by mandatory statute. Model (5) to (8) are taking one-year lag of the Model (1) to (4), respectively. Over all, our models do not fit very well, and significance level of each explanatory variable is relatively low, unfortunately. However, the estimation results of Model (5) and (6) for Non-harmonised Standardised products have a negative sign for the interaction term. Especially, Model (5) is statistically significant, while the estimation results of harmonised Standardised products, such as Model (7) and (8), are not statistically significant. We could suggest that non-harmonised national standards with mandatory statutes in Japan would possibly deter the entrance of foreign products to Japanese market.



Table 3: The Estimation results

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Non-Harmonized products Mandatory Statute		Harmonized products Mandatory Statute		Non-Harmonized products Mandatory Statute One year lag		Harmonized products Mandatory Statute One year lag	
	INT	CAP	INT	CAP	INT	CAP	INT	CAP
lngdp	0.00288*** (7.27)	0.00314*** (5.59)	0.00233*** (11.76)	0.00236*** (10.79)	0.00298*** (7.55)	0.00261*** (4.92)	0.00146*** (8.89)	0.00204*** (10.10)
Indist	0.00347 (1.71)	0.000610 (0.21)	-0.000549 (-0.54)	0.000245 (0.22)	-0.00163 (-0.80)	-0.00149 (-0.55)	-0.000309 (-0.37)	-0.00102 (-0.99)
Treat	0.00368 (1.22)	-0.00749 (-1.16)	0.00103 (0.71)	0.00177 (0.51)	0.00791** (2.63)	0.00894 (1.46)	-0.00186 (-1.55)	-0.00231 (-0.72)
Year	0.00195 (0.52)	-0.0167 (-1.91)	0.000504 (0.29)	0.00531 (1.11)	0.00576 (1.54)	0.000223 (0.03)	0.00152 (1.04)	0.00295 (0.67)
Tyear	-0.00478 (-1.12)	0.0125 (1.36)	-0.00272 (-1.33)	-0.00623 (-1.27)	-0.00901* (-2.12)	-0.00395 (-0.45)	0.000169 (0.10)	-0.00215 (-0.47)
_cons	-0.0977*** (-5.13)	-0.0652* (-2.38)	-0.0469*** (-4.93)	-0.0567*** (-5.18)	-0.0564** (-2.96)	-0.0499 (-1.92)	-0.0290*** (-3.66)	-0.0348*** (-3.43)
N	8008	4368	22568	17108	8030	4380	22630	17155

t statistics in parentheses

=\*\* p<0.05 \*\* p<0.01 \*\*\* p<0.001"

#### 4. CONCLUSION

Standardisation has been deepening drastically since the effectuation of the WTO TBT agreement. It requires member countries to harmonise each national standard published in home market with a relevant international standard for a product. The harmonised national standards with international standards may reduce existing trade barriers of home market to foreign products and, thus, may improve foreign products' access to the home market. In contrast, the publication of national standards, which is not fully harmonised with its corresponding international standards, may increase the trade barrier of the home market. Hence, non-harmonised national standards may serve as a deterrent to foreign products' access to the home market if the foreign country cites different standards from home country's one. In this regard, such standards harmonisation should be important as an international trade policy in that it would reduce the trade barriers across countries, and, thus, would affect international trade flows positively.

So far, not many preceding research papers have explored this research theme. We successfully have had an access to such standards' harmonisation information of Japanese national standards or JIS. In addition to the harmonisation of national standards, we also consider the effects of Japanese mandatory statutes, which require to all home and foreign producers to cite JIS, on international trade. In case, the mandatorily cited JIS is not internationally harmonised, it does clearly cause trade barriers to foreign products in Japan. Using our concordance between HS 6-digit products in ISIC 29-35 and ISO/IEC international standards, the harmonisation information of JIS, and the data of mandatory statutes in Japan, we could have conducted the first ever empirical analysis of the effect of the standards harmonisation on international trade flows in Japan.

Our empirical results suggest that non-harmonised Japanese national standards with mandatory statutes would interfere the entrance of new foreign products into Japanese market. This result suggests that it is required for the WTO member countries to take an extra effort to harmonise its national standards with international standards.

## LITERATURE

1. Anderson, J. E and E. van Wincoop (2003), " Gravity with Gravitus: A Solution to the Border Puzzle," *American Economic Review* 93: 170-192.
2. Blind, K. (2004), *The Economics of Standards*, Edward Elgar Publishing, Williston.
3. Blind, K. (2009)," Standardisation: A Catalyst for Innovation", Inaugural Address, Rotterdam School of Management, Erasmus Universiteit Rotterdam (August).
4. Butter, F.A.G., S.P.T. Groot and F. Lazrak (2007), "The transaction costs perspective on standards as a source of trade and productivity growth," *Tinbergen Institute Discussion Paper*.
5. Carrère, C. (2006), "Revisiting the Effects of Regional Trading Agreements on trade flows with Proper Specification of the Gravity Model," *European Economic Review*, Volume 50, Issue 2, pp. 223-247.
6. Hellevik, O. (2007), "Linear versus logistic regression when the dependent variable is a dichotomy," *Quality and Quantity*, 43(1), pp. 59-74. <http://doi.org/10.1007/s11135-007-9077-3>
7. Ijiri, N., and Haneda, S. (2012). "The concordance between the International Classification for Standards (ICS) and the harmonised Commodity Description and Coding System (HS)", mimeo.
8. Ijiri, N., Yamano, N. and Miao, G. (2013). "International Standards, Product substitutability, and Global Trade Network", *EURAS Proceedings 2013*, 187-200.
9. Ijiri, N. , Haneda, S. and N. Yamano (2014), " International standards and the product-type classification," mimeo.
10. Ijiri, N. and S. Haneda (2015), " The concordance between International standards and the harmonised Commodity Description and Coding System (HS) in ISIC 29/35 industries," mimeo.
11. Moenius, J. (2006),"Do national standards hinder or promote trade in electrical products?" Commended Paper, *IEC Centenary Challenge*, Geneva.
12. Portugal-Perez, A. Reyes, J. and Wilson, J. S. (2009), "Beyond the Information Technology Agreement : harmonisation of Standards and Trade in Electronics," *Policy Research Working Paper* No. 4916, The World bank.
13. Reyes, J-D. (2011), " International harmonisation of product standards and firm heterogeneity in international trade," *Policy Research working paper* No. 5677, The World bank.
14. Shepherd, B. (2006), "The EU Standards Database: Overview and User Guide," mimeo, available at <http://go.worldbank.org/6OEYNCYSD0>
15. Shepherd, B. (2007), "Product Standards, harmonisation, and Trade: Evidence from the Extensive Margin," *Policy Research Working Paper* No. 4390, The World Bank.
16. Swann, G. P. (2010 a), "Economics of Standardization: An Update," Report for the UK Department of Business, Innovation and Skills (BIS), Complete Draft Version 2.2, Innovative Economics Limited.
17. Swann, G. P. (2010 b), "International Standards and Trade: A Review of the Empirical Literature," *OECD Trade Policy Working Papers*, No. 97, OECD Publishing. doi: 10.1787/5kmdbg9xktwg-e.

18. Mangelsdorf, A. (2011). The role of technical standards for trade between China and the European Union, *Technology Analysis and Strategic Management*, 23:7, 725-7.  
<http://dx.doi.org/10.1080/09537325.2011.592267>
19. Jones, P. and Hudson, J. 1996. "Signalling product quality: When is price relevant?," *Journal of Economic Behavior and Organization*, Elsevier, vol. 30(2), pp. 257-266, August.
20. Czubala, W., Shepherd, B., and Wilson, J. (2009), "Help or Hindrance? The Impact of harmonised Standards on African Exports", *Journal of African Economies*, 38(5), pp. 711-744. doi: 10.1093/jae/ejp003

## THE RELATIONSHIP BETWEEN EFFICIENCY, CAPITAL AND RISK FROM THE BANKING ACTIVITY PERSPECTIVE

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### **ABSTRACT**

*In a previous research we analysed the risk-performance correlation at two banks in Romania by the quantification of the influence of the indicators of the banking risks on the banking performance indicator – financial profitability rate. Within this article, we propose to expand the research and identify the possible correlations between the levels of the efficiency, capital and banking risk on a sample of 11 representative banks of Romania. Surprisingly, there is a limited number of studies which evaluate the inter-temporal relations between the banking risk, capital and efficiency.*

*The recent financial crisis underlined the need of a subsequent understanding of the determinants of the banking risk in an increased banking efficiency and decreased banking capital environment. For the study of the risk-efficiency-capital study we will estimate a panel model in Eviews. The panel data models consist in the estimation of regression equation in which one uses time series for the evolution on a certain period of the shares of more companies and we wish to determine how certain macroeconomic variables influence the yield of those shares, a solution is the use of panel data models.*

*In order to point out the correlations between the capital, the efficiency and the banking risk we estimate an equation that will identify the correlations between the chosen variables.*

*In our opinion, this analysis is important because it offers important findings regarding the influence of risk on banking profitability and on banking efficiency. Moreover, over the analyzed period the risks faced by banks increased significantly. Therefore, it is important to know exactly the relationship between efficiency, capital and risk in order to better understand the behavior of bank management.*

**Keywords:** *banking performance, nonperforming loans, crisis*

### **1. INTRODUCTION**

Within this article, we propose to identify the possible correlations between the levels of the efficiency, capital and banking risk on a sample of 11 representative banks of Romania. During the last two decades before the credit crisis which began at the end of 2007, the European banking markets became more and more integrated. The twin forces of the deregularisation and technological change contributed to the process of the financial integration and increased the competition in the field of the financial services. As a consequence of this process, one noticed a special interest in improving the efficiency from the banking system. That is, it forced the banks to operate closer to “the best practice” or the efficient production function. At the same time, this increase in the competition could – at least on short term – lead to greater (possibly excessive) exposure to risk. This happens because the competition reduces the market share of the banks.

In this context, a number of studies focused on the impact of the capital (Repullo, 2004; Gropp and Heider, 2010) and of the operational efficiency (Casu and Girardone, 2009) on the banking risk.

Surprisingly, there is a limited number of studies which evaluate the inter-temporal relations between the banking risk, capital and efficiency. The recent financial crisis underlined the need of a subsequent understanding of the determinants of the banking risk in an increased banking efficiency and decreased banking capital environment (Haldane and Alessandri, 2009). Thus we propose ourselves to evaluate the impact of the banking efficiency on the banking risk. In this regard the low levels of efficiency would determine the banks to increase their performance by lower standards and/or the intensive monitoring of the credit. In exchange, they have an influence on the efficiency levels. For instance, the increase of the banking risk can temporally precede a decline in the cost efficiency.

On the other hand, the relation between efficiency and risk can be affected by the level of the capital especially in the light of the decrease of the banking capital level on macroeconomic level. For example, the moral hazard problems can increase the incentives of the weakly capitalised banks in order for them to increase their risk level drawing upon them in the future nonperforming loans. Similarly, the much capitalised banks can be experiencing some moral hazard problems and can be both more efficient and safer than the weakly capitalised institutions. The other way around, as the capital is expensive the much capitalised banks can, in average, increase their risk level in order to maximize the incomes.

Before beginning our research, we will use the information provided by the specialty literature and we evaluate the inter-temporal relations between the banking risk, efficiency and capital levels. We will use 11 commercial banks from Romania during 2008 - 2011. Data stop in 2011 because since 2012 the banks from the sample recorded losses and the program does not accept negative inputs.

## **2. LITERATURE REVIEW**

The literature offers contradictory results regarding the effects of the capital requirements on the risk exposure (see Berger et al., 1995; Freixas and Rochet, 1998; Santos, 1999). Thus totally, the problem whether a greater capital adequacy rate reduces or not the global banking risk remains mainly unsolved.

However, Fiordelisi, Marques-Ibanez and Molyneux (2010) consider that the bankruptcies from the financial sector are expensive, not only for the capital of the banks but for the tax payers also. Therefore the study of the variables which influence the risks of the banks and, especially of the efficiency of the banks has a long history. A first American research on the risk exposure examined the effects of the capital regulations (for example Peltzman, 1970 or Mayne, 1972).

Thus, Hughes and Mester (1998, 2009) supported the necessity to take into consideration the banking efficiency within the analysis of the relation between capital and risk. According to Hughes and Mester (1998, 2009) both the capital and the risk can be determined by the banking efficiency level. For example, the supervision authorities can allow the efficient banks (with top management) a greater flexibility.

In the same context, Berger and De Young (1997) and Kwan and Eisenbeis (1997) claim that the explicit recognition of the concept of the banking efficiency concept is very important in the empiric models by analysing the determinant factors of the banking risk on a sample of American banks. Both works prove that both the efficiency and also the capital are relevant determinant factors of the banking risk. Berger and De Young (1997) show that the decrease of

the cost efficiency precedes the increase of the nonperforming credits rate (especially at the weakly capitalised banks).

Nevertheless, Williams (2004) and Altunbas et al., (2007) reproduced both the works in a European banking setting. The sample includes European banks during 1990-1998 and discovers that the banks with weak management tend to grant credits of a weaker quality. In total contrast to Williams (2004), Altunbas et al., (2007) doesn't discover a positive relation between inefficiency and the exposure to banking risk. The inefficient European banks seem to hold more capital and assume a smaller risk. As a whole, the European studies offer contradictory observations regarding the relations between the operational efficiency, the capital and the banking risk.

Therefore, our study points out the relations between the efficiency of the costs (calculated in a previous article - Manta Alina, Bădîrcea Roxana (2014)), capital and banking risk in Romania on a sample of 11 banks during 2008 – 2011. Unlike the previous studies our sample includes data regarding the Romanian banks, covering also the crisis period which led to the radical changes in the international financial-banking system.

### **3. RESEARCH HYPOTHESES**

Before the introduction of the empiric model we can state that the research hypotheses about the relations between the risk, the capital and the banking efficiency have as starting point the studies of Berger and DeYoung (1997) and Fiordelisi, Marques-Ibanez and Molyneux (2010). In the future the efficiency levels of the banks can have an impact on the banking risk. According to the “defective management” hypothesis, Berger and DeYoung (1997), and Williams (2004) observed that the banks which operate with low efficiency levels have greater costs mainly because of the inadequate monitoring of the credit and because of the inefficient control of the operational expenses (which reflects almost immediately in the lower cost efficiency). The decrease of the cost efficiency will temporally precede the increase of the credit, operational, market and reputational risks.

The “cost economy” hypothesis supposes that there is an exchange between the short term cost efficiency and the future exposure to risk because of moral hazard considerations. In such cases, the banks seem to be more efficient from the cost point of view considering that they allot fewer resources to the risk monitoring. Therefore the volume of the nonperforming loans stays unaffected on short term. On medium term however, the banks reach higher risk levels as they buy the supplemental inputs necessary for the administration of future higher risks. This will normally lead to future higher risks. In other words, a bank can be tempted to increase its incomes by assuming some higher risks in order to compensate the lost profits.

The “bad luck” hypothesis is linked to the consequences of the increase of the banking risk on the efficiency levels. They argue that the external exogenous events (for example the unexpected shocks) can precipitate the increases of the loans nonperforming for the bank unrelated to the managers' skills or appetite for the risk exposure. These increases of the risk lead to supplemental costs and managerial effort. Thus, according to this hypothesis, we expect for an increase in the banking risk to precede a decrease in the cost and income efficiency.

The “moral hazard” hypothesis suggests a negative correlation between capital and risk which point out that the managers of the banks tend to expose themselves to more risks especially when the level of the bank's capital is low (or the banks are more inefficient). The moral hazard hypothesis could occur at the same time with the occurrence of the problems between the managers and shareholders of the bank (see Gorton and Rosen, 1995), a moral hazard traditional

problem being when the managers expose themselves to risks which are entirely experienced by the shareholders. On the other hand, the more capitalised banks have less incentives for the moral hazard (Jeitschko and Jeung, 2005) and they are more predisposed to adopt some safe practices of cost reduction (for example the shareholders can be more active in controlling the banking costs or allotting the capital).

In order to point out the correlations between the capital, the efficiency and the banking risk we estimate the following equation:

$$cost\_eff_{i,t} = f_1(Risk_{i,t}, cost\_eff_{i,t}, E/TA_{i,t}, Z_{i,t}) + \varepsilon_{i,t} \quad (1)$$

where  $i$  is an index which identifies the analysed banks,  $t$  denotes the time dimension,  $Risk$  is the variable which represents the bank risk,  $cost\_EFF$  are the scores of the cost efficiency (calculated in a previous article),  $E/TA$  is the ownership equity reported to the total assets while  $Z$  ( $j=1, \dots, 3$ ) are control variables including the factors which influence the efficiency – capital – risk relation and  $\varepsilon_{i,t}$  is the term of random error. The definitions of the variables are represented in short in the following table.

Table 1: Variable Definitions (Own interpretations)

Variable Definition	Used Symbol	Variable Measuring
Banking Activity Efficiency	<b>CE</b>	Cost efficiency measured through the DEA – VRS model
Credit risk	<b>NPL/L</b>	Nonperforming loans rate
Capital	<b>E/TA</b>	Report between ownership equity and total assets
Intervention interest	<b>IR</b>	BNR reference interest rate
Concentration degree in the banking system	<b>HH</b>	Herfindahl-Hirschman Index
Number of credit institutions	<b>NCI</b>	Number of credit institutions

Equation (1) analyses whether the changes occurred in the evolution of the cost efficiency temporally precede the variations of the banking risk.

The measuring error can be one of the main problems encountered during the evaluation of risk and banking efficiency. As the banking risk is a crucial measure in our analysis we try to identify its dimension by using the traditional report nonperforming loans to total loans NPL/L. Previous studies (for example Berger and De Young, 1997, Williams 2004) focus on the report between the nonperforming loans and the total loans (NPL) as representative indicator of the credit risk and it is past oriented.

Regarding the banking efficiency, we estimate the cost efficiency by using the data envelopment method (Data Envelopment Analysis - DEA). The previous studies focus also mainly on the calculation of the cost efficiency (for example Kwan and Eisenbeis 1997, Berger and DeYoung 1997, Williams 2004, Altunbas et al., 2007).

The banking capitalisation degree is measured through the report between equity and total assets (E/TA – leverage).

We base ourselves on the previous literature in order to introduce other factors in the model which can influence the correlations between capital, risk and efficiency. Namely, we include a set of control factors such as: the banking concentration degree (by using the Herfindahl–Hirschman), the number of credit institutions (NCI) and the monetary policy interest rate (IR).

For standardisation, the logarithms of all the data outside the cost efficiency are previously found.

Going back to our sample, we will use the quarterly data from 11 commercial banks in Romania during 2008 - 2011. The data specific to the banks is collected from their financial reports. The data regarding the macroeconomic variables is taken from the Statistics section from the National Bank of Romania site and from Eurostat data base. The final sample contains 176 observations and comprises representative commercial banks of Romania.

The correlation among the variables is usually neglectable suggesting that there is less likely that our models suffer major multicollinearity problems.

For the study of the risk-efficiency-capital study we will estimate a panel model in Eviews. The panel data models (Codirlaşu Adrian, 2007) consist in the estimation of regression equations in which one uses time series for the evolution on a certain period of the shares of more companies and we wish to determine how certain macroeconomic variables influence the yield of those shares, a solution is the use of panel data models. Thus, thanks to this type of models one can determine a single coefficient which should express the impact of a macroeconomic variable on the yield of a group of companies. The panel data models allow:

- ☐ Resuming through a single coefficient of the impact of a variable on a group of dependent variable time series (group of companies, of countries, etc.).
- ☐ Estimating specific coefficients (constant or coefficients of the independent variables) for each time series considered dependent variable – fix effects.
- ☐ Grouping dependent variables in categories and estimating the impact of the category of which it is part of on its evolution.

#### 4. CONCLUSION

According to scenario no. 1, when variable CE (cost efficiency) is dependant variable, one states there is a positive correlation between cost efficiency and nonperforming loans rate (LNPL), in other words an increase of the cost efficiency leads to an increase of the nonperforming loans rate. This thing could suggest the fact that the more efficient banks become greater loan portfolios and therefore they assume greater risks which in the future become greater which confirms the “cost economy” (Berger 1997). In other words, the efficient banks are exposed to more risks, namely an increase of cost efficiency can lead to an increase of the nonperforming loans rate suggesting the fact that these banks intentionally performed short term cost reductions which will lead to the long term deterioration of the loans portfolios quality. On the other hand, a decrease of cost efficiency caused by greater expenses with loans monitoring, will generate, similarly a smaller volume of nonperforming loans (“risk aversion management” hypothesis) or on the contrary, an increase of cost efficiency due to minimizing the expenses with the loans monitoring, can lead to an increase of the nonperforming loans (“cost economy” hypothesis). In the second case, a less efficient management could increase the nonperforming loans rate given that inefficiency can be measured not only through very large operational expenses but also through an inadequate monitoring of loan portfolios (“the defective management” hypothesis).

On the other hand, we observe there is a strong negative correlation between cost efficiency (CE) and capital level (LETA) which means that on a one percent increase of the capital/assets (LETA), cost efficiency decreases by 0.46%. In the case of efficient banks, when the efficiency will decrease, they will hold less capital. On the other hand, the less efficient banks tend to hold more capital.

Scenario no. 1 points out a statistically significant positive connection between the cost efficiency and the number of credit institutions (NCI) which suggests that the cost efficiency



levels are positively related to market competitors (justifying the opinion according to which competition makes banks more efficient from the cost point of view).

We also observe a statistically significant positive connection between the report between the capital and credit institutions (NCI) suggesting that the high capital levels are positively related to a number of market competitors (arguing thus that the opinion according to which competition can encourage higher levels of ownership equity).

On the other hand, we notice that BNR reference interest rate exercises a negative influence on the three variables which denotes the fact that at an increase by one percent of the interest rate, the cost efficiency, the capital and the banking risk level register a decrease by 0.10%, 0.38% and 2.94% respectively.

And not last of all, we identify a statistically significant negative connection between the banking risk (LNPL) and the degree of banking concentration (LHH) which suggests that the banking risks are smaller on the more concentrated banking markets. In other words, a reduced concentration degree can point out a more competitive banking market and long term less stable banking systems, as Boyd and Nicolo (2003) claim.

Table 2: Scenario no. 1. (Own calculations in Eviews)

**Dependent Variable: CE?**

Method: Pooled Least Squares

Date: 03/22/15 Time: 01:13

Sample: 2008Q1 2011Q4

Included observations: 16

Cross-sections included: 11

Total pool (balanced) observations: 176

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-13.55316	1.398792	-9.689187	0.0000
LNPL?	0.024164	0.005480	4.409219	0.0000
LETA?	-0.461384	0.025175	-18.32691	0.0000
LNCI	2.362616	0.303376	7.787754	0.0000
LHH	0.951612	0.121738	7.816870	0.0000
LIR	-0.102065	0.034653	-2.945350	0.0033

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.825169	Mean dependent var	0.522114
Adjusted R-squared	0.823803	S.D. dependent var	0.352452
S.E. of regression	0.147945	Akaike info criterion	-0.975725
Sum squared resid	42.02431	Schwarz criterion	-0.929705
Log likelihood	960.5017	F-statistic	604.1340
Durbin-Watson stat	1.528097	Prob(F-statistic)	0.000000

In conclusion, from the performed analysis result two relevant aspects from prudential supervision aspects. First of all, from the experience of the Romanian banks, one observes that the strict and rigorous implementation of the capital adequacy requirements can contribute to

the decrease of the procyclicality associated to the implementation of the present Basel requirements. Second of all, the study confirms that an increase of the capital requirements should be produced during the stagnation or economic boost periods because the increase of the capital in the recession periods can lead to the deterioration of the banking performances

## LITERATURE

1. Altunbas, Y. Carbo, S., Gardener, E.P.M., Molyneux, P. (2007). *Examining the relationships between capital, risk and efficiency in European banking*, European Financial Management 13, 49-70.
2. Berger, A.N., De Young R. (1997). *Problem loans and cost efficiency in commercial banking*, Journal of Banking and Finance 21, 849-870.
3. Berger, A.N., Herring, R.J., Szego, G.P. (1995). *The role of capital in financial institutions*, Journal of Banking and Finance 19, 393-430.
4. Boyd, J.H., Nicolo, G.D. (2003). *The theory of bank risk taking and competition revisited*, Journal of Finance 60, 1329-1343.
5. Casu, B., Girardone, C. (2009). *Testing the relationship between competition and efficiency in banking: A panel data analysis*, Economics Letters 105, 134-137.
6. Codirlașu Adrian (2007). *Applied econometrics by using Eviews 5.1*, course notes.
7. Dahl, D., Shrieves, R.E. (1990). *The impact of regulation on bank equity infusions*, Journal of Banking and Finance 14, 1209-1228.
8. Demsetz, R.S., Saindenberg, M. R., Strahan P.E. (1996). *Banks with something to lose: The disciplinary role of franchise value*, Federal Reserve Bank of New York Economic Policy Review 2, 1-14.
9. Fiordelisi Franco, Marques-Ibanez David and Molyneux Phil (2010). *Efficiency and Risk in European Banking*, Working Paper Series of European Central Bank, No. 1211 / June.
10. Freixas, X., Gabillon, E. (1998). *Optimal regulation of a fully insured deposit banking system*, Journal of Regulatory Economics 16, 111-34.
11. Gorton, G., Rosen, R. (1995). *Corporate control, portfolio choice and the decline of banking*, Journal of Finance 50, 1377-1420.
12. Gropp, R., Heider, F. (2010). *The determinants of bank capital structure*, Review of Finance, forthcoming.
13. Haldane, A. G., Alessandri, P. (2009). *Banking on the state*, Presentation delivered at the Federal Reserve Bank of Chicago twelfth annual International Banking Conference on "The International Financial Crisis: Have the Rules of Finance Changed?", Chicago, 25 September 2009.
14. Hughes, J.P., Mester, L.J. (1998). *Bank capitalization and cost: Evidence of scale economies in risk management and signalling*, The Review of Economics and Statistics 80, 314-325.
15. Hughes, J.P., Mester, L.J. (2009). *Efficiency in banking: Theory, practice and evidence*, In Berger, A.N., Molyneux, P., Wilson, J.O.S (Eds.). Oxford Handbook of Banking. Oxford University Press, Chapter 18.
16. Jeitschko, T.D., Jeung, S.D. (2005). *Incentives for risk-taking in banking – A unified approach*, Journal of Banking and Finance 29, pp. 759-777.
17. Kwan, S. Eisenbeis, R. (1997). *Bank risk, capitalization and operating efficiency*, Journal of Financial Services Research 12, 117-131.

18. Manta Alina (2009). *The risk and the performance in the banking activity*, Universitaria Publishing House, Craiova.
19. Manta Alina (2013). *Trends and perspectives in shaping financial and banking risks in the international financial crisis*, Universitaria Publishing House, Craiova.
20. Manta Alina, Bădîrcea Roxana (2014). *Measuring the efficiency in the Romanian banking system through the method of the Data Envelopment Analysis (DEA)*, Journal "Annals of the University of Craiova, Economic Sciences Series", ISSN 1223-365X, Universitaria Publishing House, Craiova, Romania, no. 42.
21. Manta Alina, Bădîrcea Roxana (2015). *Empirical Study on the Relationship between Efficiency, Capital and Risk into the Banking System of Romania*, Journal "Finance – Challenges of the Future", ISSN 1583-3712, Universitaria Publishing House, Craiova, Romania, no. 17/2015.
22. Marcus, A.J. (1983). *The bank capital decision: A time series-cross section analysis*, Journal of Finance 38, 1216-1232.
23. Mayne, L.S. (1972). *Supervisory influence on bank capital*, Journal of Finance 27, 637-651.
24. Peltzman, S. (1970). *Capital investment in commercial banking and its relationship to portfolio regulation*", Journal of Political Economy, 1-26.
25. Repullo, R. (2004). *Capital requirement, market power, and risk-taking in banking*, Journal of Financial Intermediation 13, 156-182.
26. Salas, V., Saurina, J. (2003). *Deregulation, market power and risk behaviour in Spanish banks*, European Economic Review 47, 1061-1075.
27. Santos, J.A.C. (1999). *Bank capital regulation in contemporary banking theory: A review of the literature*, BIS Working Paper 90.
28. Wall, L.D., Peterson, D.R. (1987). *The effects of capital adequacy guidelines on large bank holding companies*, Journal of Banking and Finance 11, 581-600.
29. Williams, J. (2004). *Determining management behaviour in European banking*, Journal of Banking and Finance 28, 2427-2460.

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