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Varazdin Development and Entrepreneurship Agency  
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## Economic and Social Development

14<sup>th</sup> International Scientific Conference on Economic and Social Development



Editors:

**Ana Jovancai Stakic, Petar Kurecic and Damir Dobrinic**

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## **Challenges of the Modern World**



## ASPECTS OF SUSTAINABLE DEVELOPMENT OF SMALL AND FAMILY HOTELS

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### **ABSTRACT**

*Sustainable tourism is getting more and more popular nowadays, and it requires turning to high quality, responsible and eco-friendly tourism, which can only be achieved if there is a balance between economic, socio-cultural and environmental aspects of tourism development. Owners of the small and family hotels are turning more and more to eco tourism, primarily to achieve their goal, which is the extension of the season and making larger profits. Sustainable development combines economic development, social responsibility and environmental protection. This kind of development supports a stable relationship between human activities and the nature, which would leave the healthy environment for future generations. Modern trends of returning to nature are often implemented through tourism, which encourages the development of small, family-run hotels, which generally offer personalized service and warm atmosphere in the environment of authentic architecture.*

**Keywords:** *sustainable development, small hotels, family hotels, business*

### **1. INTRODUCTION**

Tourism is a phenomenon which is almost entirely dependent on the environment, so any kind of distortion of the natural balance and the destruction of ecosystem potentially leads to the disruption of tourist movements. In the few studies on the cause and the effect relationship of environment and tourism, the primary and secondary, and intentional and unintentional disruption of the ecological balance is being discussed, especially those that sprang from the tourist movement. While under the primary think of the direct distortion of balance of ecosystems, the secondary is the result of the complexity of tourist services, and is reflected in the increased need for water, electricity and oil. To reduce the negative effects of tourism on the environment, society and the economy, it is important to understand both the sustainable development and sustainable tourism development. Modern trends of returning to nature and the original are often implemented through tourism, and they encourage the development of small, family-run hotels, which generally offer personalized service and warm atmosphere in the environment of authentic architecture. In the last few years, due to its natural and cultural heritage and improved transport links with the European source markets, Croatia has become a hit tourist destination. Small family hotels are increasingly sought after tourist product in Croatia, with a constant growth in traffic and spending per guest, with the trend of the efforts of extending the season. In Croatia there were about two hundred of small family hotels with approximately 15,600 beds, as compared to the number of beds in large hotel companies very little watching European experience. Small family hotels in Croatia became an absolute trend as they are filled 180 days a year, and generate a third more nights than traditional hotels and generate 25% of all hotel overnight stays in Croatia, which indicates their significance, enhanced quality of business and making the most of the capacity. Small family hotels make most common form of tourism not only in Croatia, but also globally. Therefore, it is the hospitality (accommodation) offer that is of particular importance for the destination identity, international recognition / desirability, and the destination competitiveness of the Republic of Croatia. Small family hotels in Croatia, should become engines in the process of improving the overall hotel industry which will be the main part of the economic sectors of tourism through sustainable development, which should increase economic growth, employment and the standard of the local population.

## **2. SUSTAINABLE DEVELOPMENT IN HOTEL INDUSTRY**

### **2.1. Overview on the development**

A development is hard to define, since it raises the question whether it represents economic growth and human well-being. In the event that the goal of the development is well-being, then it can be defined as an increase in the economic, ecological, cultural, social and political level of life. To date, the concept of development marked the acceleration of economic growth, which caused a huge gap between countries and nations. The distribution of economic and political power among the countries determines the possibility of influence of each country on economic developments in the world. Each of them is trying to have as large as possible influence on politics, in order to become more developed than others. Some countries want to have control over raw materials, energy and goods of vital importance for human life, and through this the political control of of certain poor nations. Power consumption is linked to a large number of factors specific to each area, such as population growth, the development of science and technology, geography and others. The dependence of the energy of today's society is best proved by occasional disturbances in its delivery, which causes delays in production, and therefore large material losses. The problems of energy development can not be studied outside the context of an overall socio-economic system of a country, even outside the context of the development of international political and economic relations. The development goals of energy can not be autonomous, they have to be drawn from the development goals of economic policy. Among the many problems that humanity is facing regarding the development, the most complex problems to solve are those with new technologies that have to worry about the protection of the environment. The technology requires less and less influence of political control, but at the same time it puts people in an awkward position by increasing unemployment, since due to greater automation of work less human labor is required. Throughout history with the increase in personal and social standards neglecting of the impact of development on the environment started. This led to significant pollution of air, water, soil and atmosphere, to reduction of the forest area, and thermal pollution (Udovicic, 2004). It is obvious that the progress of civilization has brought benefits to humanity on the one hand, while on the other civilizations risks its own survival through contamination. The synergy between technology development and environmental protection becomes a priority for a safe future development. Over the past three decades a lot of practical and technical knowledge has been gathered and experience that instills optimism in thinking about the possibility of energy supply in the future and a smaller environmental impact and the man himself.

### **2.2. The concept of sustainable development**

In the last two decades there has been an ever increasing exhaustion of natural resources which are mostly due to inefficient and poor planning, and not enough time for recovery. Population growth with resource depletion causes the faster destroying of many parts of the environment. The hardest hit areas are those of intensive production. The process of air, water, and soil pollution is constantly speeding up with population growth. Experts Club of Rome concluded that "an unreasonable use of many important natural resources with many types of pollutants have already exceeded the measure that is physically viable in nature. No significant reduction in the use of materials and energy consumption, in the following decades will come to an uncontrolled fall of the amount of food energy consumption and industrial output per person" (Črnjar, 2002, pp. 187). Correcting the huge imbalance is only possible by applying the principles of sustainable development. Sustainable development combines economic development, social responsibility and environmental protection in order to ensure a high level of quality of life in the future. The concept of sustainable development contains a combination of of scientific principles and human values. At a time when human activities began to act on

natural resources, sustainability takes on social meaning and interpreted in accordance with the different interests of society or a group in society. Therefore, the concept of sustainable development must be interpreted scientifically, and not in accordance with the current interests of certain interest groups. The concept of sustainable development includes three important elements (Dragicevic, 1996, pp. 189):

The concept of development - which is not identified with economic growth as it relates to the quantitative elements of the economic system while development relates to qualitative concept of social development, which in itself includes economic, cultural and social development of the bands.

The concept of need - refers to the question of allocation of basic resources for the achievement of quality of life. The term "basic needs" is relative because what was once considered a luxury, today is a necessity in developed countries.

The concept of future generations - indicates that the essence of sustainability is reduced to the question: What are we going to leave to future generations? Future generations should not burden our development and environmental problems, and should get them to convey a better quality of ecosystems than it is today.

Our present is inevitably the past of the future generations so we have to decided today about their possibilities. We should build a society step by step, a society which is based on the individual who lives in harmony with the development of their ethical and professional awareness of the current and future significance of the environment in all its dimensions.

### **2.3. The concept of sustainable tourism development**

Turning to sustainable tourism implies turning to high quality, responsible, selective and competitive tourism, which can be achieved if there is a balance between economic, socio-cultural and environmental aspects of tourism development (Hall and Richards, 2007). Sustainable tourism development should be implemented in the operations of all businesses in the tourism business, regardless of their size, number of employees and market position. By including in the tourism process, each stakeholder, regardless of their role in the process, should respect the principles of sustainability and ethical standards, in order to maximize the positive effects of tourism development, and reduce the negative ones. Therefore, sustainable tourism should (Central portal of the World Tourism Organization, 2005):

use environmental resources optimally as a key element in tourism development, maintaining essential ecological processes contributing to the preservation of natural heritage and biodiversity;

respect the socio-cultural authenticity of the local communities, to preserve the culture of building, life and the traditions and contribute to intercultural understanding and tolerance;

ensure long-term sustainable economic operations, providing evenly distributed socio-economic benefits to all stakeholders, including secure employment, earnings potential and social services and contribute to poverty reduction.

Management of tourism development is a complex process in which it is important to set clear goals and strategies for their achievement, but also the implementation of the monitoring and control of the entire process. When the sustainability is included in such a process it is important to reflect on this development for which the starting point and the goal will be to be a man. It is a lot more humane and balanced development, for whose implementation the cooperation of all stakeholders of tourism is required, as well as their involvement in the strategy development and decision making process. The importance of sustainable tourism development is reflected in the philosophy which is based on preserving the original identity, long-term thinking, responsibility, cooperation, partnership and providing high value for money. This enables the extension of the life cycle of tourist enterprises and increasing level of productivity and competitiveness of the entire tourist system.

### 3. SMALL AND FAMILY HOTELS IN CROATIA

#### 3.1. Quantitative determinants of the offer

According to the Croatian Ministry of Tourism, based on the document of the Ministry of Tourism 'list of categorized tourist facilities: hotels, campsites and marinas in Croatia' in October 2015, indicates that in Croatia there are about 362 hotel facility of small family hotels with fewer than 50 accommodation units. Although these hotels are registered as a limited liability company, it is difficult to say whether it is a family-owned hotel, and facilities managed by the family, which makes them, in the true sense of the word, regarded as one of the small family hotels. In Croatia, there are still no official criteria for the distribution of the hotel on small, medium and large, and therefore each author uses a different criteria. The general criteria used to define small hotels as the following (Ninemeier, 2005, pp. 25):

- accommodation capacity,
- amount of investment,
- amount of revenue,
- ownership and management,
- method of financing,
- products and markets,
- organization and employment.

According to the above, small and family-run hotels are those with up to 50 rooms, which are family owned, and whose ownership and control functions are integrated. The owner is also the manager, and he defines the concept and arrangement of the building. The offer of the hotel is partially extended in the form of wellness, restaurants or meeting rooms, and attracts mainly individual guests, and create a personalized relationship of small family hotels with guests. The organization of work in the hotel is flexible.

Small family hotels in Croatia have around 7,800 accommodation units and 15,600 beds, with the prevailing buildings of small family hotels with 3 \* (53%) and 4 \* (32%). At the same time, very few small hotels are categorized with 5 \* (3%), while there are much more of small family hotels with 2 \* (12%).

*Chart 1: Hotels - structure in% to the number of stars (Ministry of Tourism, 2015).  
(Contact Author)*

Finally, 5.5% of small hotels categorized as aparthotel. In terms of distribution, it should be noted that, unlike the objects of family arrangements that are almost entirely oriented on coastal counties (about 67%), small hotels in Croatia, are largely located in the continental part of the country (33% of total accommodation capacity).

Accommodation capacity of small hotels are located primarily in the area of Split-Dalmatia County (25%), Primorje-Gorski Kotar (13%) and Istria (10%) and the least in Međimurje County (1%), Krapina-Zagorje County (1%), Bjelovar-Bilogora (1%) and Virovitica-Podravina (1%). Accommodation capacity of small hotels in other counties are arranged according to the following order: Zagreb (9%), Dubrovnik-Neretva County (8%), Zadar County (6%), Sibenik-Knin County (6%), Osijek-Baranja County (4%), Karlovac (3%), Belize counties (3%), Podravska (2%) and Brod-Posavina (2%).



*Figure 1: Small hotels - the spatial distribution in% (author 'according to the Ministry of Tourism, 2015).*

### **3.2. Quantitative determinants of demand**

There is no available statistical data about (registered) overnight in small hotels on the territory of Croatia.

However, based on unofficial data of the National Association of Family and Small Hotels of the degree of capacity utilization of their State at the level of about 45% annually, one can speak of the number of overnights at around 2 million. In other words, the share of small hotels in the total outturn overnight hotel is at the level of about 15% (Ministry of Tourism, 2015).

### **3.3. Problems that include small and family-run hotels on tourist market**

Before the professionalization of smaller tourist reception capacity, or private renters of rooms and suites, their inclusion on tourist market was almost undetectable and unsatisfactory, primarily because of the current share of the gray economy, unregistered guests, employees and generated revenue. Since they were predominantly offering only accommodation services, as well as the unorganized arrangements, capacity utilization was unsatisfactory and the average

occupancy rate was very low. With the professionalization of those facilities and converting the small family hotels, there was an expansion of their supply and they achieved the multiplier effect (better offer, more employment, higher prices, extension of the season, better capacity utilization and higher revenue for entrepreneurs), however, their inclusion on tourist markets and the general placement took place more or less randomly, and without identified and developed strategic positioning on tourism market. One of the reasons why is the Croatian tourist offer of small and family-run hotels in a fairly big disadvantage is their appearance on the tourism market, for which it can be said that, although tourism professionals say a priori that they have beautifully constructed and decorated hotel complex, a nice aesthetic look and in addition good, high-quality and fast service, as well as a warm welcome and a warm atmosphere, courtesy of hotel staff which easily wins the confidence of the guests, they still can not achieve the target objectives, primarily the extension of the season and making larger profits.

The main obstacles to the development of small and family-run hotels can be classified into two groups:

- problems among market players (barrier to cooperation)
- entrepreneurship and human resources.

The lack of the brand:

The largest number of hotels, especially small hotels in Croatia, are independent, ie. is not holder of the brand. Brand is one way to gain international recognition. As competition intensifies, it becomes increasingly difficult to maintain its position in the market.

The judicial framework - offer is connected with a range of administrative and legal restrictions, which does not facilitate commerce and a breakthrough on the market.

Tourist policy- in the past, and now, even though the public authorities aware of the importance of tourism they still impose decisions harmful for small hotels and tourism in general (0.0 per mill). Doubling the responsibilities of state and local public institutions and private initiatives. The current structure of the supply of small hotels, and in particular sector destined for tourism promotion is dysfunctional. Most of the criticism relates to doubling responsibility (associations, tourist boards, county, ministry) which leads to a waste of resources. The solution may be the introduction of more precise delegation of responsibility, that is, the hierarchical structure which would attributed a single body or person decision-making power in order to devise a common operating line.

Such origin of the decision-making is transferred from time to time by on county department, to organization or the external body (a manager or team of experts).

Relations on the market - emphasized individuality as a result of the competitive environment has resulted in the closure of any possibility of cooperation and skepticism towards the merger. The biggest problem is the lack of coordination between the public and private sector because of the different modes of operation, and within both categories there is a significant discrepancy.

System Limitations:

A range of other obstacles are: a lack of entrepreneurial spirit and the participation of support structures, lack of leadership by those in charge of managing the various components of the system of the offer, the lack of "tourist culture" of hoteliers (insufficient knowledge of the mechanism of the tourism market).

The lack of change of generations - in most small hotels managerial class is usually of old age, while young people are attracted to jobs in better-paid sectors or less demanding business (mainly in foreign countries). Because of age, hoteliers are being criticized for not being innovative and dynamic.

Insufficient level of professionalism and entrepreneurship - preparation of hoteliers and their associates for appropriate promotion and commercialization of large resources of our area is



very limited. This also applies to the state and local officials in charge of tourism planning and programming and all those who have a frequent contacts with the visitors (dealers, cops, ...). As for the private sector, there is a reinvestment of income, fear of risk and too much attention is devoted to short-term planning of the hotel.

The need for qualification / training personnel - regardless of the fact that the majority of workers and hoteliers say that they've managed to modernize, and they have no need for specific courses and seminars, attitude towards this kind of offer is mostly positive, although most hoteliers do not know for them. Since the offer of courses and seminars is average, this is the indication that there is a need for better communication about diversity and characteristics of the course by the organizers.

#### **4. SUSTAINABLE DEVELOPMENT OF SMALL AND FAMILY HOTELS IN CROATIA**

##### **4.1. Eco-certification of small and family-run hotels in Croatia**

In Croatia, small family hotels which carry the eco label of small family hotels with the logo of "heart with a leaf" are recognized as objects that take the best care for the environment in their area. Croatian eco-label for tourism accommodation in the small and family-run hotels follows the structure of the European eco-label Eco-flower. Eco certificate confirms that the object is using energy rationally, and resources for work and that their verification is done by strictly defined procedures. The construction of the facility must have all the necessary checkpoints and resources to prevent energy loss. Also, the certificate relates to the sorting, classification and selective collection of waste that are generated as by-products in the process of manufacturing in the hotel.

The advantages of eco-sign for hotels are multiple:

Eco-sign indicates and proves the high quality and care of the environment.

Reducing the consumption of resources such as water, electric, energy and waste reduction, which leads to cost reduction.

Commitment to preserving the environment leads to a healthy accommodation, a healthy diet and a healthy environment for guests and employees, and therefore directly affects their satisfaction and contributes to meeting their expectations.

Eco-sign contributes to better quality services and strengthens the position on the market and distinguishes hotels that have the sign from all the others.

Small family hotels in Croatia have large, but unused opportunities for development. According to the National Association of Family and Small Hotels of 2016, small and family-run hotels that have eco-label are: Hotel Srakovčić from Karlovac (Karlovac), Hotel Vicko Starigrad Paklenica (Zadar) Hotel Savus Slavonski Brod (Brod Posavina) and hotel Bitoraj in Fužine (Gorski Kotar County).

##### **4.2. Aspects of the introduction of sustainability in the process of small and family-run hotels**

Sustainable development is a process that small and family-run hotels have to pay attention to before investing in a business venture, and during the time of the drawing up of a business plan. It is a process which entrepreneurs should take into account throughout the entire life cycle of their businesses, which is why it is important to measure the sustainability of their business plan during the five-year or some other period. A complex process such as the sustainable development of tourism should be included in the same postulates, as well as the the basic values of the company. Orientation toward sustainable development should be visible in the mission, vision, objectives and activities of the company. The importance of including the principle of sustainability in the business planning process for small tourism businesses is even

greater, given that the cost of energy and other sustainable elements are smaller if they are part of the development of their own companies. Sustainable hotels are already known model of sustainable development in the world, and such a principle of development can be applied to small family hotels, as well as other small businesses in the tourism industry, such as building houses. Important issues to be seen in the planning and design of the hotel facilities, and have a focus on energy efficiency and savings include (Bohdanowicz, Martinac P., I. 2001, p. 5):

- selection of the appropriate location,
- availability of local building materials and (renewable) energy sources,
- implications on consumer behavior, provided services, total costs,
- aspect of the design.

This implies that the facility can start with a sustainable business operations from the very beginning, in such a way that the site does not distort the perspective of the environment and that the selection of the appropriate, sunny location affects the energy use of the building and the possibility of using renewable energy sources. In this phase we may additionally emphasize the aspects of sustainable business, through the using ecologically acceptable building materials, minimizing of waste material and maximizing the use of renewable energy and passive energy sources through the use of sunny and shady parts of the space. With such planning of energy efficiency all three pillars of sustainability are present-economic, environmental and social, and they should be a part of the business plan of small businesses in the tourism industry. Economics is reflected in savings that will bring energy efficiency to business, while it manifests ecologically through apparent minimizing of the impact of construction and operation of the facility on the environment. The sociological aspect of sustainability at this stage of development planning is achieved by employing local suppliers of building materials, through communication with local authorities and residents of the building plans, taking into account all aspects of the load capacity of tourist destinations in which the hotel is built. In addition to paying great attention to quality of thermal and sound insulation of its buildings, sustainable buildings are energy-efficient because of the interactive energy systems that are installed in all areas of the facility, especially in the rooms. In fact, such systems allow turning off of all devices and lights in the room when there is no one inside, as well as turning off air conditioning when opening a window in the room. To reduce the volume of their own waste, sustainable hotels and other accommodations, such as the ones in rural tourism, offer food products in bulk, in a recycling packages and they compost food scraps in cooperation with local farmers who supply the local hotels with fresh ingredients. In this way a circle of sustained cooperation between small business owners and stakeholders of the local community is created, which allows the multiplication of positive environmental, social and economic effects. The economic benefit of such and similar cooperation tourism stakeholders enables further investment in the local infrastructure, thus achieving long-term sustainability principle. The quality of the environment will affect tourism destination and the increase of the number of guests of the facility, and the long-term compliance with sustainable principles will contribute to the preservation of environmental quality tourist destination. Hiring local labor in order to improve the local community is one of the fundamental principles that govern the operations of each of sustainable small businesses in tourism. This foundation is joined by principles of job security, fair income, participation in decision-making and creating a healthy working environment. Tourism officials working in such facilities are more productive and have a lower rate of absenteeism, and are due to involvement in the decision-making more committed to the realization of the principles and objectives related to the sustainability of the business hotel. The contemporary guest is highly informed and knowledgeable about all the trends in the tourist industry, including those related to sustainability. However, today there are still a lot of tourists who put their own comfort and luxury stay ahead of the sustainability,

ecology and responsible travel. It is very important to educate all stakeholders in tourism on what really sustainable facility provides to its guests and therefore is important in all aspects of the tourist stay to be sustainable. Research trends in the tourist market indicate that the number of tourist accommodation that operate in a sustainable way will continue to grow, because of the increased demand of tourists staying in those kind of buildings, which respect and live the principles of sustainability. The influence of consumers in recent years has increased so much that now they have their own acronym - Scuppies-socially conscious upwardly mobile persons (Deloitte, 2009). Such consumers in tourism are eco-friendly and socially sensitive, and they want to spend their money exclusively in establishments that offer an environmentally, economically and socio-culturally acceptable solutions for a tourist stay. Research conducted in 2007 by an American Institute has shown that 19% of the population of the United States for the purchase of all goods and services take into account their health, healthy lifestyles and sustainability. Seventeen percent of consumers are guided by other principles of purchase, and the rest of consumers pay great attention to environmental protection, the use of organic products, recycling, renewable energy and staying in unpolluted area. Almost 90% of people who responded to the poll conducted among 2,000 hotel guests in the UK believe that hotels and tourism companies have an obligation and responsibility to operate in a sustainable manner that does not endanger the environment, and 54% of them want to make a positive step in reducing carbon emission during their next stay (Pavlovic, 2008, pp. 2). The results of these studies show the importance they attach to sustainability tourists when choosing accommodation capacity where they will be staying. When there is a stay of tourists in a sustainable building, the staff employed in tourism have to inform tourists about ways in which they can contribute to the achievement of sustainable development. The basic principle of all actions and measures to protect the environment must be of practical use, because none of the spectacular action would lead to success unless the teamwork has been set up and implemented (Persic, 2003, pp. 5):

- introducing guests with possible areas of savings,
- educating guests on the proper disposal of waste,
- open "Green advertisement" to collect ideas of guests,
- build your own internal catalog of environmental protection measures, print it in several languages, and make it available to guests,
- encourage the use of public transport,
- popularize the use of local eco-products and publicize information on the eco-suppliers and partners,
- regular guests informed about the savings achieved on the basis of the measures taken to protect the environment and to reward accomplished.

The benefits of sustainable tourism businesses can be numerous for tourists who visit such facilities are related to the education and dissemination of information on the sustainability of the practice, which later can be practiced in the home country through obtaining new experiences and the experience of that tourist destination.

#### **4.3. The statutory legislation**

The ruling structures in many countries implement laws, provide subsidies to motivate small hotels to become sustainable. But Croatia does not have a single law dealing with sustainable business in the hotel industry. According to the Environmental Protection Act, the state provides tax incentives and the exemption of payment of fees to all the hoteliers who in any manner reduce the negative impact on the environment. In the event that the Government can not motivate hoteliers incentives, however regulatory pressure through fees and prohibition follows, if any form of business causes damage to the environment. In Croatia, according to the legal provisions of environmental protection, the hotel settles the damage that has been made,

and covers the cost of eliminating the pollution. Although legislation is good enough "motivator", some hoteliers are thinking that they cost too much, because they have to hire experts to design new policies to meet ecological standards.

## 5. CONCLUSION

The basic problem of introducing sustainable business practices in the small and family-run hotels is still the lack of awareness of hotel management at the negative impacts that their business have on the environment. Turning to sustainable way of doing business means preserving the resource base for future generations, and also making the best of opportunities offered in the tourism market, related to the growing needs of tourists for sustainable products and services. Sustainability entrepreneurs reduce their operating costs, become more competitive and extend the life cycle of their tourism products. To achieve even better recognition on the market, it is necessary to increase cooperation between the local population, destination management organizations, local authorities and organizations working for the protection and improvement of the environment. Hoteliers should be further informed of the benefits of the sustainable way of doing since it would attract a new clientele and thus further increase their income.

Exposed to numerous information about environmental disasters, modern tourists are becoming more aware of the effects which humans have on the environment, and sustainable small and family-run hotels should intensify marketing activities which are proving that tourism could be a business that minimizes its impact on the environment, encourages the development of local communities and is economically efficient. In order to differentiate from the competition and increase their level of competitiveness, small and family-run hotels in the tourism industry should be involved in the process of marking quality and sustainability, and this philosophy of business should be implemented in the development of their business plan.

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## WORK DEVELOPMENT IN ENVIRONMENTALLY SUSTAINABLE PROJECTS

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### ABSTRACT

*This research thesis is conducted for the reasons of explaining the advantages of having educated and trained workforce on the environmental safety issue in order to successfully operate in modern organizations. We made conclusion that there are great advantages in achieving sustainable development in organizations that pay attention and invest in education and training programs for increasing awareness on environmental protection. Benefits of sustainably managed workforce for achieving the sustainable goals we explained through case studies conducted earlier and a review of numerous research taken by people highly competent in this area. In this business performance one of the key advantages is to have a quality competent green human resource management (HR).*

**Keywords:** *advantages, development, environmental, goals, quality, safety*

### 1. INTRODUCTION

Sustainability makes references to the continuation of a project's goals, principles, and efforts to achieve desired outcomes. Although many grantees think that guaranteeing the sustainability of a project means finding the resources to continue it "as is" beyond the grant period, ensuring sustainability really means making sure that the goals of the project continue to be met through activities that are consistent with the current conditions and workforce development needs of the region, including the needs of both workers and industry. Thus, sustainability does not mean simply maintaining the status quo in terms of funding, staffing, and activities

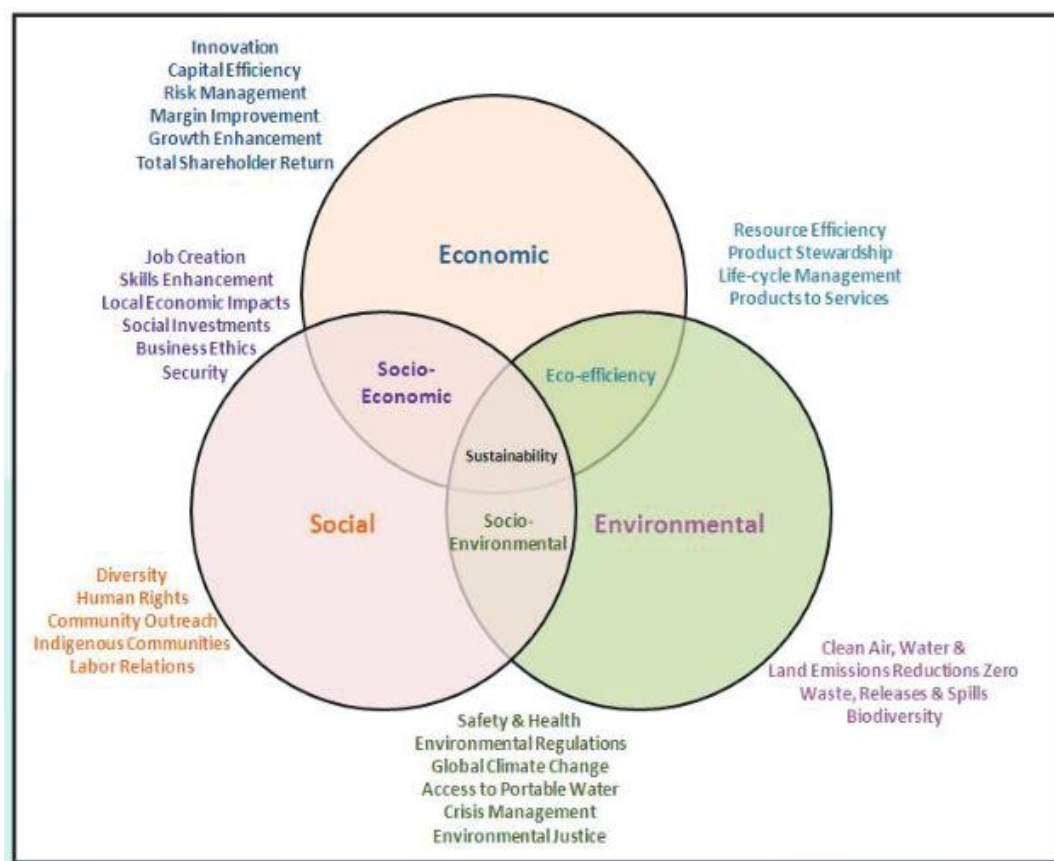
### 2. SCIENTIFIC BENEFIT

The importance of the study is to explain expected impacts of the skills and abilities of evaluating influence of HR management to create efficient workforce that participate in developing engineering project plan that has the special assignement in sustainable projects.

### 3. SUSTAINABLE DEVELOPMENT

Development is improving the wellbeing of people. Raising living standards and improving education, health, and equality of opportunity are all desirable and are essential components of economic development. Sustainable development, on the other hand, is development that lasts, because in addition to an economic component, there are social and environmental components. So that sustainable development must be a proactive strategy to develop sustainability. As it was proposed initially by the World Commission on Environment and Development (1987) sustainable development must meet "the needs of the present without compromising the ability of future generations to meet their own needs." Sustainable development requires mobilizing

governments, the private sector, and the general public toward sustainable communities. And "sustainable urban development is ultimately a cultural statement about ourselves, how we want to live, and our ability to manage our needs, desires, and dreams in ways that are effective and caring." Improvement of global quality of life imply the implementation of change that to provide to every person a life of dignity; or life in a society that respects and helps realize all human rights. These changes must include the eradication of poverty, unemployment, and inequitable social conditions. Sustainable development ensures the well-being of the human person by integrating social development, economic development, and environmental conservation and protection. Sustainability is also a business strategy that drives long-term corporate growth and profitability by mandating the inclusion of environmental and social issues in the business model. Unlike corporate social responsibility, which retroactively addresses issues, sustainability looks forward by changing the nature of the company. At the 2002 Johannesburg World Summit on Sustainable Development, there was made some important conclusions. If the concept of sustainable development is to be put into widespread use, its principles must be integrated in to all disciplines at every level of society. This necessity was explicitly recognized by Agenda 21, which placed education among its top priorities for the advancement and implementation of sustainable development. Even in countries with strong education systems, there is a need to reorient education, awareness, and training to increase understanding and support for sustainable development (HDRC, 2003).



*Figure 1: Sustainable development*  
(Barnes, P. E., *Green standards*, B & E Review (Oct/Dec), 1996)



Social development implies that the basic needs of the human being are met through the implementation and realization of human rights. Under basic needs we are considering access to education, health services, food, housing, employment, and the fair distribution of incomes. Economic development expands the availability of work and the ability of individuals to secure an income to support themselves and their families. Economic development includes industry, sustainable agriculture, as well as integration and full participation in the global economy. Social and economic developments reinforce and are dependent on one another for full realization.

#### **4. ENVIRONMENTAL NEEDS AND IMPACTS**

The most important adverse impacts on the urban environment affecting people and caused by man and nature are:

- Water pollution and depletion
- Energy use and wastage
- Air pollution:
  - Outdoor, by industrialization and motorization emissions, and indoor, from household and occupational sources
  - Solid waste, especially hazardous waste, when improperly discharged by households and industries.
- Resource Losses:
  - ✓ Groundwater contamination and depletion
  - ✓ Land and ecosystem degradation
  - ✓ Degradation of historic structures and cultural resources
- Environmental hazards:
  - ✓ Natural disasters (e.g. hurricane, earthquake, volcano, flooding, etc.)
  - ✓ Man-made hazards (e.g. chemical spills and other industrial accidents)

We used the definition of sustainable development established in ASCE Policy Statement 418, “sustainable development is the challenge of meeting human needs for natural resources, industrial products, energy, food, transportation, shelter and effective waste management while conserving and protecting environmental quality and the natural resource base essential for future development”

#### **5. DEVELOPMENT AND SUSTAINABILITY**

Economic development could only lead to sustainability if it is decentralized, carefully planned, environmentally sensitive, locally based, and focused on creating jobs and improving quality of life in all island communities. Development benefits must be maximized beyond industrial estates and business centers, while the adverse impacts of development must be minimized in our residential areas and our parks and beaches. A comprehensive, integrated, and strategic approach which combines the local government role as a service provider, its regulatory and legislative powers, and its internal economic policies can have a remarkably positive effect on moving economic activities and development toward improving socioeconomic quality and achieving sustainability. This is why it is said that the three core elements of sustainable development are:

- Environmental considerations must be entrenched in economic policy-making.
- Sustainable development must incorporate an inescapable commitment to social equity.
- "Development" must not simply mean "growth". It must imply qualitative as well as quantitative improvement.

In sum sustainable development must be different from economic development of the past. It must be a proactive strategy to develop sustainability. And its benefits must last well into the next generation, and beyond.

## **6. TRANSITION TO THE GREEN ECONOMY**

Climate change is a major driver of technological change and innovation in the search for measures and policies to mitigate or help adjust to its effects. Sustainable development and the integration of environmental protection into economic and social development objectives are among the most challenging issues on the national and international policy agenda. The level and structure of employment and skill needs worldwide will be affected both by the direct impact of global warming (particularly in agriculture, fishing, tourism and mining) and by the policies adopted at the local, national and international levels to reduce carbon emissions. The meaning of green works has become symbol of a more sustainable economy and society. Jobs in all economic sectors are could be greener, but six sectors have particular salience in this respect: energy supply, especially of renewable energy; construction; transportation; basic industry; agriculture; and forestry. Millions of green occupations already exist worldwide. The report launching the Green Jobs Initiative counted at least 2.3 million in the renewable energy sector alone in just six of the G20 countries. The same report estimated that measures to reduce energy consumption and CO<sub>2</sub> emissions in the residential building sector could generate 3.5 million new jobs by 2050. Alarming, the lack of relevant skills may turn out to be a bottleneck in the “greening” of economies. There is an urgent need for training in the full complement of skills required across a broad range of jobs so that economies can both become greener and realize the potential growth in employment the process offers. Lessons from previous experiences of transition suggest that the transition to cleaner energy requires proactive steps to facilitate the adjustment of labor markets, both to maximize opportunities for new jobs and to address the problems associated with potential job losses. Skills development will play a prominent role in both aspects of this endeavor. Several countries have reported that a “skills gap” already exists between available workers and the needs of green industries. A 2007 survey of Germany’s renewable energy industry concluded that companies are suffering from a shortage of qualified employees, especially in knowledge-intensive occupations. The Confederation of British Industry has likewise expressed concern that sectors going green are struggling to find technical specialists, including designers, engineers and electricians. In the United States, the National Renewable Energy Laboratory has identified a shortage of skills and training as a leading barrier to energy-efficient growth. In Brazil, large biofuel refineries are constrained in their development by a shortage of highly skilled personnel.

*Table following on the next page*

Sector	Change in skill profile	Type of skills required
Recycling / waste treatment and recovery	New skills created	Rapid technological changes in this area are likely to create a growing need for new skills.
Construction	Stronger green element of existing jobs	Same generic skills of those already in the building sector but job will require "add-on" in terms of e.g. renewable energy knowledge, installation, and diagnostic techniques. Industry may experience increased demand in higher-skilled employees but some jobs created as a result of Energy Performance in Buildings Directive likely to be low skilled. Recent documentation has pointed out that IT-literate artisans will be required in the long-term.
Bio-based products	New skills created / Stronger green element of existing jobs	Modern biotechnology likely to require highly-skilled employees with intensive knowledge although still unclear as to whether the skills they need are "new" or add on to existing skills.
Energy efficiency	New skills created / Stronger green element of existing jobs	Legislation such as the European Building Performance Energy Directive will create a strong demand for energy assessors (creation of new skills). Increased energy legislation and building regulation at national and international level will mean that the building industry will be much more closely regulated. Processes will be managed to avoid the exorbitant fines that will be levied for energy and environment violations. This shift will be supported by the emergence of multidisciplinary practitioners who belong to a single, integrated professional body. These high-calibre professionals will occupy well-paid positions with roles that extend from building design to the provision of through-life services
Green Transport	Stronger green element of existing jobs	Legislation on fuel economy standards will create demand for natural gas vehicles (NGV), liquid petroleum gas (LPG), biofuels and diesel / electric hybrid vehicle, for which updated skills and knowledge will be necessary.
Renewable energy	New skills required / created / and up-skilling	More systems-based approach required where skills related to understanding and applying specifications within the supply chain. Higher level and multi-disciplinary skills will be necessary. Specifically, knowledge of renewable energy, energy efficiency, sustainable construction techniques, legislation, resource management.

Table 1 European Commission "Employment in Europe, 2009" report and ECOR (Cegara J.G., 13th European Conference on Knowledge Management, Cartagena, Spain, 2012)

## 7. "THREE LEVELS" APPROACH

This model, developed by the National Research Centre of Alcohol and Other Drugs, clusters inter-related strategies at three levels of activity:

- systems,
- organizational, and
- team or individual.



*Figure 1: Workforce Planning Model (Final Report of the World Conference on Education for All: Meeting Basic Learning Needs, Jomtien, Thailand, 5-9 March 1990 (New York, Inter-Agency Commission (UNDP, UNESCO, UNICEF, World Bank) for the World Conference on Education for All, 1990)*

To create a workforce plan begin by identifying the current state of the organization, define any gaps that exist and determine drivers that will impact your future plans. Successful utilities have followed the path described below.

Create a core task force or committee comprised of a small number of cross functional team members.

Develop and conduct an assessment to identify the utility's needs. The assessment should be developed in the form of a questionnaire and can be administered via pencil and paper or by using online survey software. Once the survey is complete, follow up one-on-one interviews should be conducted to clarify as needed. Assessment questions should focus on:

- Identifying critical positions that accomplish the core business of the organization
- Defining current workforce demographics and retirement projections
- Determining skills and competencies that will be needed in the future
- Learning what training and knowledge resources are currently available
- Identifying existing recruiting, selection and on boarding practices

Create a workforce plan that identifies actions to fill the components of the workforce pipeline, from recruiting to fulfillment to retention that aligns with the utility's strategic business direction.

The structure of organization will partly determine how the process of workforce planning, including consultation and data retrieval, should be progressed.

The main tasks of workforce planning are:

developing an understanding of the internal and external environment and how those factors will affect current and future workforce

understanding the makeup of current workforce and the knowledge, skills and competencies are required to achieve intended business goals in the current and changing environment

linking human resources strategies with business objectives

thinking about future service pressures and needs, and putting in place staffing strategies to address these.

## **8. ENGAGEMENT STRATEGIES**

Employees who believe that their work is important and that they can make a difference have much more positive perceptions about their work and their work environment. They find their responsibilities and work meaningful. Previous studies have demonstrated the positive impact of meaningfulness on employee engagement (Cohen 2008, Kahn 1990, May et al 2004). Having a meaningful job is the most important factor influencing levels of engagement. This is true for all types of worker in all kinds of jobs. Employees who are able to relate their tasks to a broader context and feel that they can make a difference have higher levels of motivation and are more likely to be engaged. The nature of the organization might facilitate this process and help employees find their jobs meaningful. Traditionally, individuals working for public sector organizations find greater meaning in their jobs, compared with their counterparts in the private sector. Moreover, meaningfulness is largely attached to the type of work individuals are asked to carry out in an organization. Managers are essential in helping individuals find meaning in their work. One way to facilitate this is through regular communication about the organization's vision and future objectives. Creating a common framework helps employees to see a bigger picture in their daily work. Moreover, managers play a crucial role in designing jobs in such a way that individuals are enabled to experience positive feelings during their work. Job enrichment with environmental safety concern is just one of the effective techniques that enable organizations to create meaningful jobs, even for more routine tasks. However, independently from the type of work, it is important to match people to their jobs according to their qualifications and skill levels to raise their level of engagement.

Engagement levels are affected by the working environment. Where employees can see that they have support from others to help them do their job, there is a sense of teamwork and they can safely express themselves, then engagement will be higher. This is one area where HR professionals can play an important role helping line managers design jobs effectively, and develop selection processes that match individual skills to jobs.

Line managers act as the interface between the organization and the employee, and can do much to impact on engagement. Another key HR role is therefore to pay close attention to the selection, development and performance management of line managers to ensure they maximize their potential to be engaged.

A diverse workforce is a reflection of a changing world and marketplace. Diverse work teams bring high value to organizations. Respecting individual differences will benefit the workplace by creating a competitive edge and increasing work productivity. Diversity management

benefits associates by creating a fair and safe environment where everyone has access to opportunities and challenges. Management tools in a diverse workforce should be used to educate everyone about diversity and its issues, including laws and regulations. Most workplaces are made up of diverse cultures, so organizations need to learn how to adapt to be successful. Most reviewed associations have understanding of the principles of sustainable development, but implementations approached in many different ways. Integration across all business areas such as development, asset management, and housing/community services, and tackling each aspect of sustainability (social, environmental, economic, organizational) appears incomplete, and translating broad commitments to action appears less well balanced. Training, development and learning plans should include programs, workshops and sessions to enable employees to develop and acquire knowledge in environment management, green skills and attitude. Job rotation in green assignments should become an essential part of career development plans of talented green managers of the future. Training contents should be developed to increase employee competencies and knowledge in environment management. Extensive use should be made of online and web-based training modules and interactive media as training tools for not only for environment management training but for other functional areas as well. Environment- related aspects of safety, energy efficiency, waste management and recycling can become the focal points of green training.

## 9. CONCLUSION

Environmental management and sustainability is a multidisciplinary field which focuses on finding solutions to the world's most pressing environmental problems. Focus on real-world problem solving and the development of applied solutions to environmental issues at local, national and international levels. In a green economy, growth in income and employment should be driven by public and private sector investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services. The energy, agriculture, tourism, manufacturing, forestry, fishery, and water management sectors and sub sectors all provide viable opportunities for diversification with green economic potential. Specific areas targeted under an industrial diversification policy will be developed and supported. These include: knowledge-based industries; cultural and entertainment industries; ethnic products; food processing; the maritime industry; services industries; biotechnology; information technology (IT); high-tech manufacturing; pharmaceuticals; food production and processing; alternative energy and third and fourth generation renewable energy industries. A diverse workforce is a reflection of a changing world and marketplace. Diverse work teams bring high value to organizations. Respecting individual differences will benefit the workplace by creating a competitive edge and increasing work productivity. Diversity management benefits associates by creating a fair and safe environment where everyone has access to opportunities and challenges. Management tools in a diverse workforce should be used to educate everyone about diversity and its issues, including laws and regulations. Most workplaces are made up of diverse cultures, so organizations need to learn how to adapt to be successful. Most reviewed associations have understanding of the principles of sustainable development, but implementations approached in many different ways. Integration across all business areas such as development, asset management, and housing/community services, and tackling each aspect of sustainability (social, environmental, economic, organizational) appears incomplete, and translating broad commitments to action appears less well balanced. Training, development and learning plans should include programs, workshops and sessions to enable employees to develop and acquire knowledge in environment management, green skills and attitude. Job rotation in green assignments should become an essential part of career development plans of talented green managers of the future. Training contents should be developed to increase employee competencies and knowledge in



environment management. Extensive use should be made of online and web-based training modules and interactive media as training tools for not only for environment management training but for other functional areas as well. Environment- related aspects of safety, energy efficiency, waste management and recycling can become the focal points of green training.

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## INFLUENCE CHANGE IN VALUE OF OIL ON THE INTERNATIONAL MARKET

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### ABSTRACT

*By the beginning of 20<sup>th</sup> century oil became a more important and essential power factor for industrial and commercial heating sector, as well as for transportation sphere. Oil has by far the greatest value of traded primary commodities, making it of interest to exporters and importers alike. It is a key primary energy source and it is often argued that no other fuel can compete for many of its uses in terms of price and convenience. As a special commodity, the formation of oil price should also accord with the basic laws, but because of the particularity of oil resource, in the analysis of international oil price, except considering supply and demand this basic factor, there are many other invisible factors need to be considered. The price of oil at an annual average basis has experienced enormous movements in the past. Researches of different cases have shown that the variability of the price of oil has significant consequences related to the economic activity and economic growth. One rule is singled out: oil booms will always improve nationals' welfare, as long as they do not adversely affect the government budget. For this reason, control of government expenditure during the increase in oil prices is crucial, and important for future research*

**Keywords:** *oil, oil price, export, import and international market*

### 1. INTRODUCTION

Crude oil is a naturally occurring substance which is found in widely differing amounts in various countries throughout the world. Oil has by far the greatest value of traded primary commodities, making it of interest to exporters and importers alike Bacon (1991) . Oil is not used directly for any important purpose, rather it is refined and split into different products which are either used directly for final consumption or are in turn further processed. Different crude oils yield different proportions of these refined products, and since the value is related to the end uses, those crude oils yielding higher proportions of valuable by-products (petroleum motor spirit, diesel fuels, jet fuels, petroleum gas etc) will tend to sell at a premium relative to other crude oils. According to EIA (2011), heavy crudes tend to sell at a discount because of the negative effects on the efficiency of refining process.

A given crude oil price determined on a particular day varies by location and date of delivery. Since crude oil is expensive to transport (long distance trade has to take place since most of the major consumers produce little or no crude oil), the price at the point of production and at the point of import are quite different. Nakamura (2008) , in a study of oil refining and markets, shows that the margin for transport cost, insurance and handling cost can be substantial as long hauls may take several weeks and holding large inventories can be very expensive. Therefore, firms facing uncertain future demand often wish to purchase 'forward that is, to pay a price

determined now for delivery later (e.g in one months' time). Such a price can be quite different from the price for immediate delivery (spot) in the same market. However, over lengthy periods (using quarterly or annual average prices) the whole term structure of prices tends to move closely together.

Conventionally oil prices are quoted in US dollars per barrel whatever the point of delivery. According to Fattouh (2007), the oil pricing regime is based on formula pricing, in which the price of certain crude is set as a differential to a certain reference price. He outlined three crudes that have tended to be the reference points, which are explained below.

**Arab Light** (API 340) : This is crude produced in Saudi Arabia, the world's largest producer/exporter of crude oil. Ghanwar, is the primary producing field for Arab Light Crude and according to EIA (2011), Ghanwar is the world's largest onshore oil ...field with estimated remaining reserve of over 70 billion barrels. Since Saudi Arabia is a dominant producer, the price of this crude was seen as a key variable in the pricing strategy of the Organization of Petroleum Exporting Countries (OPEC) and a representative of Middle-Eastern production. According to Fattouh (2011), Arab Light prices have tended to be replaced by those of the similar Dubai Light (API 32.0) since the early 1990's as a representative crude price for Middle-Eastern production. In June 2005, the new OPEC reference basket was introduced. It is currently made up of the following: Saharan Blend (Algeria), Girassol (Angola), Oriente (Ecuador), Iran Heavy (Islamic Republic of Iran), Basra Light (Iraq), Kuwait Export (Kuwait), Es-Sider (Libya), Bonny Light (Nigeria), Qatar Marine (Qatar), Arab Light (Saudi Arabia), Murban (UAE) and Merey (Venezuela).

**Brent Crude** (API 38.0): Brent crude is sourced from the North Sea. It is used to price two-thirds of the world's internationally traded crude oil supplies. According to Platts (2012), the current API gravity for Brent crude is estimated at 38 degrees and the suppliers' content at 0.45%, hence it is classified as sweet crude. The nearness of the North Sea to major refining industries and large market of North West Europe, has given this crude a central role over the past two decades.

**West Texas Intermediate** (API 40.0): This crude commonly referred to as WTI, serves as the reference point for the US market. WTI is light crude, lighter than Brent crude. According to Platts (2012), WTI contains about 0.3% sulphur and is rated as sweet crude. WTI is expected to command a higher price than Brent crude - however, starting from late 2010, WTI began to sell at a discount due to rapid increases in crude oil production from tight oil formation. It is further reported that Brent has become more representative in the marginal cost of crude oil which led to the EIA in July 2012 to begin to publish Brent crude spot price forecast as against the WTI it normally used.

Fattouh (2007) argued that the oil market has undergone structural transformation that has placed oil prices on a new high path, which is due to the emergence of new large consumers (such as China and India) and the geopolitical uncertainties in the Middle East - hence, the reaction of the oil market is generally in response to market fundamentals of supply and demand. As we say, oil has by far the greatest value of traded primary commodities, making it of interest to exporters and importers alike Bacon (1991). It is a key primary energy source and it is often argued that no other fuel can compete for many of its uses in terms of price and convenience. The price of oil even at an annual average basis has experienced enormous movements in the past.

## **2. HISTORICAL OVERVIEW OF THE FLUCTUATION OF OIL PRICES ON THE INTERNATIONAL MARKET**

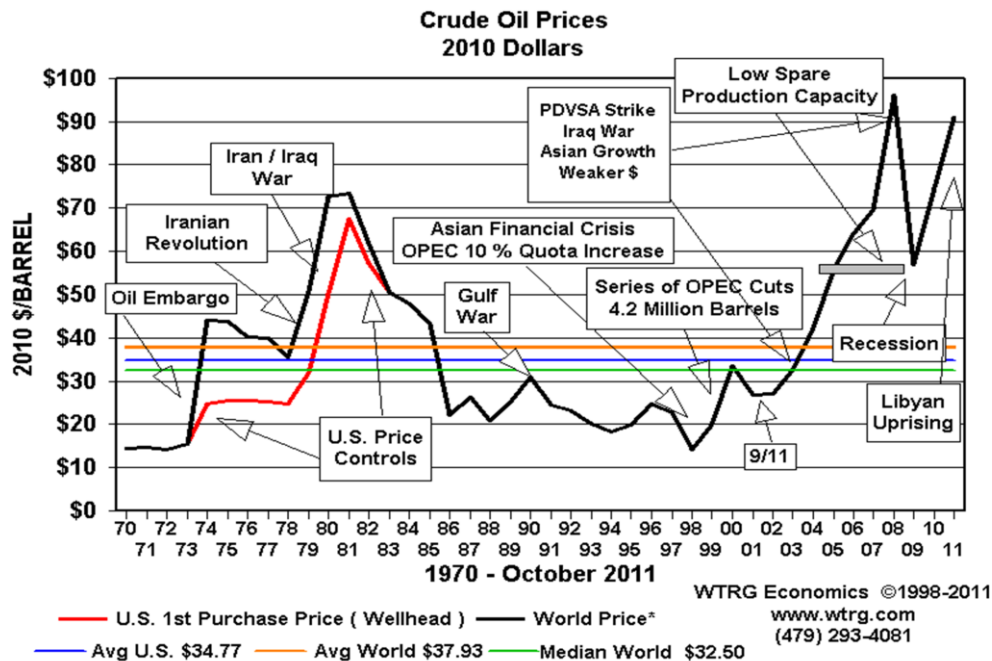
As it is known from the history of oil production and extraction, the first successfully realized oil extraction process was done by Edwin Drake in Pennsylvania in 1859. Oil price shocks According to Chuku (2012) , “oil price shocks are unexpected and unpredictable changes in global oil prices, caused by exogenous factors, which are likely to impact on endogenously determined economic variables” . Also as it was stated by Hamilton (2012) since then oil has started to be one of the most dominant energy resources in the world. It can be easily noticed that oil price has never been as high as when it was extracted and produced first time, of course compared to the nowadays value of US dollar. In his another paper Hamilton (2011) shows that, however, as time passed and demand was never staying at the same levels, oil prices showed changes as well. For instance, after the period of 1862-1864 US Civil War oil prices and demand for oil fell essentially. By the beginning of 20<sup>th</sup> century the role of oil in an economy changed slightly. Compared to the 19<sup>th</sup> century oil became a more important and essential power factor for industrial and commercial heating sector, as well as for transportation sphere.

Crude oil prices behave much as any other commodity with wide price swings in times of shortage or oversupply. In normal terms, oil prices ranged between \$1.71 and \$2.00 from 1950 through to the end of 1960s. When viewed in real terms (2011 dollar), the price of crude oil fluctuated between \$11 and \$14 during the period (BP 2011). As a whole, the price of oil was relatively stable during this period.

OPEC was established in 1960 with five founding members Iran, Iraq, Saudi Arabia, Kuwait and Venezuela. By the end of 1971, six other nations joined the group: Qatar, Nigeria, United Arab Emirates, Algeria, Indonesia and Libya. From the formation of OPEC through to 1972, the price of oil experienced steady decline. However, a little over two years later, OPEC through the unintended consequence of war asserted its power to influence prices. According to Seymour (1980), the significant oil price increases of the 1970s convinced many observers that OPEC had become a cartel that its founders envisioned. In general, Oil price shocks are not a new phenomenon. it has been a dominant feature in the oil market during the last three decades (Baumeister and Peersman 2009) . The main shocks have been illustrated in Figure 1 and reviewed in as following:

*Figure following on the next page*

Figure 1 Crude Oil Price Fluctuation (1970-2011)



Source: <http://www.wtrg.com/prices.htm>

### 3. FACTORS INFLUENCING THE FLUCTUATION OF INTERNATIONAL OIL PRICE

In accordance with the economic basic theory, price level of some commodity refers to the continuous adjustment result between the effective supply quantity and the effective demand quantity of this commodity in the market. As a special commodity, the formation of oil price should also accord with the basic laws, but because of the particularity of oil resource, in the analysis of international oil price, except considering supply and demand this basic factor, there are many other invisible factors need to be considered.

Throughout the several big shocks of international oil price in the history, we can always see the existence of **imbalance between supply and demand** in the oil market, therefore, the relation between the oil supply and demand in the international oil market is considered as the most direct and most obvious factor that affect the international oil price, and normally, imbalance of supply and demand would easily become the powerhouse of big fluctuation of international oil price (Baumeister and Peersman 2009; Giraud 1995).

From the demand perspective, oil prices are linked, like those of other commodities, to the level of economic activity in the industrialized countries. Demand, both from consumers and the industrial sector, increases with economic and population growth, and slow down when economic growth rates decline. The demand for oil is also affected by factors such as the exchange rate, depending on the country being a net importer or exporter of crude oil, and the rate of industrialization in developing countries.

Oil importing countries, such as the US, will increase their oil demand as a result of economic growth. In oil exporting countries it is likely that an expansion in the oil sector has led to growth in GDP, as has been the case for countries like Russia and Saudi Arabia. In these countries,

high oil prices based on rising oil demand create an inflow of oil derived revenue, increasing economic growth. If oil prices stabilize at too high levels, economic growth in importing nations might decline, causing a decline in demand and prices of oil (Pirog 2005). High prices will also lead to increases in exploration and development budgets leading to new oil discoveries and increased supply which over time will cause prices to decline. High prices can also make alternative fuels more competitive; potentially reducing the demand for oil.

From the perspective of oil supply, the major factors that affect the fluctuation of oil supply is due to firstly, the limited supply capability of international oil. On one hand, as a non-renewable energy the total amount of petroleum resource is limited, on the basis of a statistic, it doesn't exist newfound large oil field in recent 20 years, that's the reason why the oil proved reserves is very hard to increase substantially; on the other hand, the oil production capacity, including the capacity of exploration, development, transportation, refining, marketing and other stages, isn't increasing fast enough to keep up with the oil consumption and the capacity of production increasing in oil producing countries is obviously deficient at present; third, oil production cost would affect the supply quantity in the oil market by affecting the interperiod production allocation decisions of producers (Cong et al. 2008).

Currently the oil producing countries play a more and more important role in the world energy structure and the oil consumption countries play less and less, therefore, it is widely believed by the domestic and overseas scholars that OPEC plays an important role in the factors that affect the fluctuation of international oil price. Since the members of OPEC has 75% the world's proven oil reserves, especially the oil supply of OPEC in 2004 reached 40% of the world's total oil supply, the newly increased supply occupies even 70% of the world's newly increased supply. It is such a global oil supply structure that decides OPEC plays a predominant role in the international oil market. So the policies and measures of oil production taken by this organization, the instability of under production and production increasing plan of OPEC would result in rapid rising of oil price and substantial improvement of risk premium. According to the quantitative analysis of the factors that affect the international oil price, which was through the concepts of cointegration and error corrective model conducted by Cheng Wei-li, the crude oil production of OPEC would have a long-term far-reaching impact on the oil price, in the long run, with each increase by 1% of production in OPEC drops the oil price by 1.23%.

From the perspective of oil demand, the major factors that affect the fluctuation of international oil price are as below:

### **Economic diversification in OPEC countries.**

For a long time, the economic structure in OPEC countries is generally single, the petroleum industry is the most important department in the national economy and the government's entire financial revenue relies primarily on the income brought by oil exporting, however, this single national economic structure is easily affected by the international oil market, to get rid of the overdependence on oil industry, the OPEC countries has begun to formulate a series of positive measures to promote the economic diversification, while vigorously developing the oil industry and petrochemical industry, the countries begin to pay attention to the development of non-oil industries and make an effort to increase the non-oil Industrial percentage of gross domestic product. The increase of oil dollars brought by high oil price, especially before the financial crisis, contributed to enough capital owned by the OPEC countries for adjustment of economic structure, the diversification in each country achieved generally substantial results, the single economic structure was broken, the industrialization in each country accelerated. The energy industrial proportion of gross GDP in the gulf countries dropped from 38% in 2000 to 34% in 2005, however, the non-energy industrial scale increased from 273 billion dollars to 608 billion dollars. From 1996 to



2006, the number of productive factories in six gulf countries increased from 1390 to 10431, and the number of industrial workers increased from 110 thousand to 820 thousand (Zhao 2009).

With the continuous promotion of economic diversification and the continuous adjustment of domestic economic structure, the internal oil consumption in OPEC countries increased gradually, which caused that the OPEC countries become an important demand side in the international oil market. Although currently the oil demand in European Union, OECD and other western developed countries shows a downward trend gradually, but because the oil consumption in emerging market economies, especially in Middle East, Latin America and other oil exporting countries, increases rapidly, the world's oil total consumption increases constantly. Thus it can be seen that the economic diversification in OPEC countries has a significant impact on the supply and demand structure of international crude oil and an indirect impact on the trend of international oil price.

### **The supply and demand fluctuation of international oil would affect directly the change of international oil price.**

According to the economic theory, demand is one of the basic factors that affect the international price, thus, the fast-growing oil demand would cause the increase of oil price inevitably. While reviewing the several big fluctuations and increase of international oil price in the history, among that it is easy to see the important role the change of oil demand played. Before the outbreak of financial crisis, the global economy began to show the recovery growth since 2002, and in 2003 showed a rapid development trend, above all the development scale of traditional manufacturing industries expanded cease lessly in newly industrialized countries, as is mentioned above, because of the adjustment of economic structure, the oil consumption in traditional oil exporting countries had increased, the global oil demand and consumption also had a big increase and the increase rate was far greater than that of oil supply, which caused the oil supply was more and more serious. The global economy suffered a financial crisis in the second half of the year 2008 and its development sank into stagnation, and even retrogression, under this influence, the global oil demand and consumption fell sharply and even the international oil price plummeted. For these reasons, the change of international oil demand should be considered as one of the direct factors that affect the fluctuation of international oil price.

### **Change of the crude oil inventories in all countries.**

Petroleum inventories include conventional inventory and unconventional inventory. Conventional inventory refers to the inventory, which can guarantee the world's petroleum production, processing and supply system normal running. And unconventional inventory refers to the commercial inventory, which is mastered by the transnational oil companies. Although the conventional inventory occupies above 80% of the global crude oil total inventory, the impact of which is far smaller than the impact of unconventional inventory on the international oil price. In the long run, as the buffering between oil supply and demand, oil inventories in all countries play a stable role on international oil price. Normally when the oil price is low, all countries increase its oil inventories generally in order to push the oil price upward; in contrast, sell the oil in store when the oil price is high, in order to push the oil price down. In the short term, oil inventory plays an important role on the fluctuation of international oil price. The oil in store is often purchased in quantity when the international oil rises, which pushes the international oil upward in a short time; the reverse is possible. Thus it can be seen that the oil inventory has a very complicated impact on the international oil price, it cannot be judged according to the same standard.

#### 4. EFFECTS OF OIL PRICE SHOCKS ON OIL-EXPORTING COUNTRIES

In this section of the study, several views and studies will be discussed and analyzed related to the effects of oil price shocks on economic growth of oil-exporting countries. In other words, a general view on the effects of oil price shocks on economic growth will be provided through the examples of different oil-exporting countries. According to the previous researches and works done on the effects of oil prices it can be stated that oil price variability has significant consequences related to the economic activity and economic growth. Apparently, these consequences and effects are considered to affect and influence the oil-exporting and the oil-importing economies in different ways. While oil price increases are generally accepted to have positive effects on oil-exporting countries, they are expected to affect oil-importing countries in a negative way.

One of the most popular theories that explains the effects of oil price increases on economic output growth in an oil-exporting country is the Dutch disease theory. The first time the term "**Dutch Disease**" was used was in 1977 in reference to the experience of the Dutch economy following oil discoveries in the Netherlands, and the subsequent contraction of manufactured output and expansion of government services (Corden 1984). According to Corden and Neary (1982) and Neary and Van Wijnbergen (1986) this theory states that higher oil prices, generally, change the industrial structure of the oil-exporting country making it more concentrated on oil industry and non-traded sectors. Two real effects, namely, resource booms and busts have been highlighted by Corden and Neary (1982) and Neary and Van Wijnbergen (1986), the first is the spending effect, which is the additional spending on tradable and non-tradable goods as real income rises during the boom. Since the foreign-currency price of traded goods (in the non-booming sector) is exogenous for small open economies and the price of non-traded goods is determined domestically, the spending effect leads to a rise in the relative price of non-tradable goods. That is, the real exchange rate appreciates. As a result, production of traded goods becomes less attractive and their output decreases. Over time, the capacity to produce traded goods contracts, causing deindustrialization. The second effect is the resource movement effect, which occurs if the natural resource sector shares factors of production with other sectors of the economy. The boom in the oil sector causes factor prices to be bid up in order to attract factors of production from other sectors. This leads to a further squeeze of the tradable goods sector, causing further deindustrialization effects. Hence, according to the Dutch disease theory an increase in oil prices is not a beneficial situation for the economy of an oil-exporting country.

Fardmanesh (1991) tries to explain the stylized fact that oil booms in most oil-exporting countries expand the manufacturing sector and reduce the agricultural sector. His analysis employs a three-sector, three-factor general equilibrium model where agriculture uses land and labor, manufacturing uses labor and capital and non-tradable activities use labor and capital. It is assumed that capital is sector-specific in the short run, but nationally mobile in the long run. Given the assumption of a small open economy, prices of oil, manufacturing and agricultural outputs are exogenously determined. However, he adds the assumption that an increase in the price of oil results in a rise in the "world-price" of manufactured goods relative to agricultural products".

Short-run analysis shows that the spending effect of the boom will expand the non-tradable sector and undermine the agricultural and manufacturing sectors. But, the "world-price effect" will expand the manufacturing sector and undermine the agricultural and non-tradable sectors. This is due to the effect that a rise in the relative price of manufactured goods increases its supply and causes labor to move from other sectors into the manufacturing sector. On the demand side, the impact of the world-price effect is ambiguous. However, if the country is a net importer of manufactured goods, the income effect of the rise in the world (relative) price of manufactured goods could expand the manufacturing sector. This outcome occurs

because the world-price effect leads to an excess supply of non-tradable by lowering national income and the purchasing power of consumers. Thus, in the short run, the oil boom unambiguously undermines the agricultural sector. The manufacturing sector, on the other hand, can expand if the positive world-price effect can offset the negative impact of the spending effect on the sector's output. These results also hold in the long run. However, real appreciation disappears in the long run, since the spending effect cannot affect factor prices and the relative price of non-tradable indefinitely.

The asymmetric effect of oil price shocks in oil-importing countries was broadly discussed and analyzed in previous studies. However, the concept of an asymmetric effect of oil price shock in oil-exporting countries can be quite different. Moshiri and Banihashem (2012) suggested that in most oil-exporting countries the revenues from the oil industry are closely connected to the government, making it the most important influential power in economic activities. On the other hand, the government's size and its role in economy should be taken into consideration. So an oil price increase in an oil-exporting country meaning the higher oil revenues, leads to implementation of new projects and investments. Nevertheless, while an unexpected oil price decrease occurs, those government-based projects and investments stay unfinished. Consequently, in this situation a government has no choice but to borrow to meet the budget deficit occurred.

The effects of oil price shocks on economic growth of an oil-exporting country can also be discussed from the other perspective as it was done by Rautava (2002), through the example of the largest oil-exporting country in the world – **Russia**. It is a generally accepted fact that the Russian economy is highly dependent and affected by the oil prices. The exports of Russia in relation to GDP were around 33% and the half of the export revenues was the share of energy. It was identified that a 10% percent increase in oil prices would lead to a 2.2% increase in the level of GDP. Another research done on the oil dependency of Russia by Benedictow et al. (2013), states that the economic recovery of country in 2000 is directly connected to the high oil prices. During the period prior the financial crisis of 2008, Russia has had a 7% increase in GDP level since 2001, hence resulting as one of the strongest economies in the world. In the other research the impotency and the role of the oil prices in case of Russia was confirmed one more time by Ito (2012). Moreover, it was stated that the economy of Russia is highly sensitive to the oil price changes. The results of analysis showed that in a long-term period 1% increase in oil prices would increase GDP by 0.44%.

One of the researches on the effects of oil price shocks on economic growth of oil-exporting country was done on one of the main oil-exporting countries – **Venezuela** by Mendoza et al. (2010). One of the main findings of the analysis is that, the oil price shocks that occurred during the period (1984-2008) the analysis captured, have had a positive effect on the Venezuelan economy. Moreover, it is mentioned that oil price increases were more significant and affected economy more intensively than the oil price decreases. Lastly, the asymmetric effect of oil price shocks on economic growth of an oil-exporting country was determined.

Another good example for explaining and analyzing the effects of oil price shocks on economic growth of an oil-exporting country is **Nigeria**. According to the recent analysis by Oyeyemi (2013), since oil was discovered in Nigeria it has started to be the dominant factor in the economic life of the country. Oil revenues equaling the large amounts of GDP, exports and total revenues of the country make the economy very sensitive to the changes in oil prices. So the analysis confirmed the positive relationship between oil price increases and economic situation, on the other hand, showing that during the periods of oil price decreases disruption effects occurred in balance of payments and government finances. Moreover, it was mentioned that even a small shock in global oil prices will have a long-term effect on the economic growth of the country. The results of another study in Nigerian context by Umar and KILISHI (2010)

also confirmed this fact and showed that oil price increases trigger the GDP ratio to rise and accordingly GDP will fall after the oil price decreases.

One more not less significant research that was conducted by El Anshasy (2009) on 15 oil-exporting countries and the effects of oil price shocks, showed that unanticipated oil price increases are not harmful in case of long-term growth. Moreover, it was mentioned that fiscal policy has a great contribution in transmitting process of oil price shock into economy and the countries that pay more attention to the public investment share can withstand the oil price shocks in better way than those who are less public investment concentrated. Four main policy implications were suggested for improving the growth as a result of high revenues from an oil price shock:

- government should diversify its policies and expand the non-oil tax base;
- government should pay more attention to the social spending rather than cutting the capital expenditure;
- government should increase the expenditures to improve the infrastructure and public services;
- lastly, an autonomous wealth fund can be established to transfer the oil revenues.

Several interesting empirical studies have been published on **Arabic Countries**. Taher (1987) studied the impacts of changes in the world oil prices on the different sectors of the Saudi economy. A macroeconomic model of the economy was developed and estimated using econometric techniques for annual data from 1962-1983. Taher's model indicated that that even under the optimistic price scenario, government oil revenues will fall considerably short of the estimated 200 billion Saudi riyals suggested by the Fourth Development Plan, 1985-1990. Al-Mutawa (1991) analyzed the effects of oil shocks and macroeconomic policy changes for the United Arab Emirates. A theoretical model is developed within the framework of the Dutch Disease literature. It contains four unique features that are applicable to the United Arab Emirates economy. These are:

- the presence of a large foreign labor force;
- OPEC's oil production quotas;
- the division of oil profits, and
- the important role of government expenditures.

The simulation results show that an oil-quantity boom leads to a higher welfare gains than an oil-price boom. Moreover, an oil-price or quantity bust always leads to lower economic growth and have a negative welfare loss.

Al-Mutairi (1993) attempted to identify the sources of output fluctuations, and the dynamic response of the economy to changes in some economic variables, including policy variables such as oil prices changes government expenditure and money supply. In this study, several economic variables reflecting different economic stimuli are used. The variables consist of two macro-economic variables: GDP and index for price level two policy variables; M1 and government expenditure, and one external shock measured by innovations in the price of export petroleum. Al-Mutairi's empirical results suggest that for short term horizons of one and two years, shocks to oil price account for more than 40% of the variance of GDP forecast errors. However, at longer horizons of three years and more, these stocks are seen to be unimportant in inducing GDP fluctuations, accounting only for less than 10% of the variance. Shocks of real government expenditure are also found to have a significant role in causing GDP fluctuations, accounting for more than 20% of the forecast variance of GDP. As far as the non-oil GDP is concerned, oil price shocks are found to explain a relatively small fraction of the forecast horizons. Money supply, on the other hand, is shown to play a small role in inducing both total and non-oil GDP variations. Shocks to money supply

account only for less than 5% of the forecast variance of total and non-oil GDP at all forecast horizons, suggesting a limited role that monetary policy can play in influencing the economic activity in Kuwait.

Al-Mutawa and Cuddington (1994) extend the standard three-sector Dutch Disease model to capture the main characteristics of a prototypical small Gulf state i.e., U.A.E. In particular, foreign oil companies and guest workers play large roles in the economy, oil exports are restrained (to some extent) by OPEC quotas, and oil profits are the primary source of government revenue. Finally, the government has a policy of providing public services (health care, education, etc) free of charge to both nationals and guest workers. Al-Mutawa & Coddington found that the net impact of oil booms (due to higher prices or relaxed OPEC quotas) on the welfare of nationals is ambiguous. Nevertheless, a rule-of-thumb emerges: oil booms will always improve nationals' welfare, as long as they do not adversely affect the government budget. Containing government expenditure during booms is, therefore, critical. This may be difficult when there is a large inflow of guest workers in response to the boom and the government is committed to a policy of providing public services to new arrivals. They concluded that small Gulf states may have the choice, within the context of OPEC negotiations, to press for either an increase in world prices (with OPEC quotas unchanged) or a relaxation of their quota (with prices unchanged). Our analysis shows that, assuming the revenue impact is constrained to be equal under the two scenarios, the optimal choice depends critically on the same parameters that determine whether a boom causes a 'Dutch Disease' (i.e. a reduction in welfare). In cases where the boom results in an improvement in the budget surplus (implying that national welfare must rise), an increase in the quota level is shown to be preferable to an oil price Increase.

Mehrara and Oskoui (2007) found that oil prices are a major source of fluctuations in Iran's and Saudi Arabia's macroeconomy, but not in Kuwait and Indonesia. Kuwait is able to cushion the effect of oil shocks by using its stabilization and savings fund and the right structural reforms. While Indonesia's good fiscal policies have helped the country to avoid major mistakes and allowed structural reforms, leading the country to faster and expanding growth, away from resource-based production, including oil. Eltony and Al-Awadi (2001) study the impact of Oil Price fluctuations Macroeconomic Variables of Kuwait economy. Their results indicate a high degree of interrelation between major macroeconomic variables. The results also highlighted the causality running from the oil prices and oil revenues, and government development and current expenditure, towards other variables. The most striking result is that government fiscal stimuli are the main determinant of domestic prices, while monetary stimuli have the least results.

More recent study by Al-mulali et al. (2010) examines the impact of oil shocks on Qatar's gross domestic product using time series data from the period 1970-2007 covering all the oil shocks. The Johansen Juselius cointegration test and VECM Granger causality test are employed in this study. The results indicate that oil price has a positive effect on Qatar's gross domestic product, but at the expense of higher inflation. Qatar seems to have suffered from financial surpluses and rapid economic growth caused by sharp increases in the oil price. At the same time, with a fixed exchange regime and tight monetary policy to deal with these events, this has caused the price of assets to increase sharply, leading to high levels of inflation in Qatar.

## 5. CONCLUSION

In Libyan context a small number of researchers have attempted to assess the impact of fluctuation in oil exports on some Libyan economic activities. Abohobiel (1984) tested a macroeconomic model for the Libyan economy using quarterly data over the period 1962-1977. However, there was no study regarding shocks in oil prices. Baryun (1981) attempted to assess

the factors that affected the Libyan balance of payments during the period 1962-1977. He concluded that the impact of the increase in oil exports, following the oil embargo, on the Libyan balance of payments had been subject to the adopted monetary and fiscal policies. However, there was no investigation regarding the impact of fluctuations in oil prices. Elbeydi et al. (2010) investigates the relationships between export and economic growth in Libya. They developed and estimated an econometric model in order to determine the direction of causality in both, short and long run. Using annual data on Libya's exports and GDP over the time period 1980-2007, they have analyzed the time series properties of these variables in order to determine the appropriate functional form for testing the hypothesis.

The study finds that GDP, exports, and exchange rate are cointegrated. Based on the model results, the evidence suggests the strong support for long-run bidirectional causality between export and GDP. Moreover, they conclude that both export and economic growth are related to past deviations (error-correction terms) from the empirical long-run relationship. It implies that all variables in the system have a tendency to quickly revert back to their equilibrium relationship. This fact means that any rise in export growth would have a positive influence on economic development in both the long- and short-runs. The results of this study also suggest that promoting exports via export promotion policies will contribute to economic growth in Libya.

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## THE LABOUR MARKET IN ROMANIA THROUGH THE MAGNIFYING GLASS OF INTERREGIONAL DISPARITIES

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### ABSTRACT

*The decrease of regional disparities represents one of the fundamental objectives of the regional development policy promoted by the EU, all the more so as the last waves of enlargement of the EU deepened even more these differences. As a member state of the EU, Romania is actively involved in reducing the economic gaps by applying some regional development strategies and policies. If before 1989 interregional disparities had a relatively low level compared to Western European economies or to other former communist countries from Eastern Europe, after the abandonment of the communist regime the disparities deepened. The aim of this paper is to present the results of the labour market analysis from the perspective of the regional gaps, carried out based on some of its specific indicators. The sinuous evolution of the standard deviation for the analysed indicators (employed population, average number of employees, activity ratio, job vacancy rate, and unemployment rate) revealed increase or decrease of the regional disparities for the entire period. Compared to 1998, however, in 2013 the regional gaps increased. There are significant orientations of the population employment and the number of employees towards the services sector determining these way changes of the economic profile for some regions. The regional poles on the labour market have been as follows: Bucharest-Ilfov region for the best values of the studied indicators, and North-East region and South-West Oltenia region for the lowest values.*

**Keywords:** labor market, interregional disparities, convergence, divergence

### 1. INTRODUCTION

By the Treaty of Rome (Title XVII, article 158) the legal basis of the regional development policy (RDP) was established at the European Economic Community (EEC) level which aimed at „reducing disparities between the development levels of different regions and the shortfall of disadvantaged regions or islands, including rural areas” ([http://www.europarl.europa.eu/transl\\_es/RO/juri/treaties/tce\\_consolidat.doc](http://www.europarl.europa.eu/transl_es/RO/juri/treaties/tce_consolidat.doc)). Until the 1970s the problem of intranational disparities was among the priorities of the national governments of EEC. Starting from the middle of the 1970s the foundations of RDP were laid down at community level (Luţaş & Câlea, 2005, p.99). The successive rounds of enlargement of the EU deepened, however, even more the regional disparities in the Community. Currently, the objectives of RDP aim at three different territorial levels: EU level; member state level; territorial unit level which include more states. As a member state of the EU, Romania is also engaged in reducing disparities and strengthening the economic and social cohesion at regional level. There are 8 development regions in Romania.

If before 1989 interregional disparities had a relatively low level compared to Western European economies (Zaman et al., 2013, p.21) or to other former communist countries from Eastern Europe (Diaconu, 2014, p.77), after the abandonment of the communist regime the disparities deepened. The causes are manifold. Among them we mention the following: different natural and human resources (Oţil & Părean, 2010, p.267; Goschin et al., 2008, p.82), economic structure of regions (Antonescu, 2012, p.9; Cârnu, 2010, p.77), Romania’s reduced capacity to absorb structural funds for regional development (Zaman et al., 2013, p.21), different regional attraction of capital in general and direct foreign investments in particular (Zaman et al., 2011, p.14; Nistor, 2012, p.742; Zaman et al., 2013, p.21), with negative effects



on economic disparities, advantageous geographic location compared to other EU member states for some regions (Diaconu, 2014, p.78), differences in infrastructure (Russu, 2014, p.27), etc. This paper aims at analysing the labour market in Romania from the perspective of interregional disparities. In this sense we processed some INSSSE and EUROSTAT statistical data which relate to this type of market. In their analysis we mainly used the method of dispersion. In order to identify the types of positive/negative influences of the national, sectorial and regional factors upon the employed population and the number of employees, we applied the Shift-Share method. For this latter method TEMPO-ONLINE regional statistical data on employed population and number of employees were used for the three large economic sectors: agriculture, industry and constructions and total services, in 2013 compared to 1998. The indicators monitored in the paper were the following: employed population, number of employees, activity ratio, unemployment ratio, job vacancy ratio. The analysed period included the years between 1998 and 2013. This period was chosen for two reasons. Firstly, as 1998 is the year when Law 151 on regional development in Romania (replaced since 2004 by Law 315) was adopted, by which the establishment of development regions was decided. Secondly, a longer period of time can offer a better and more complete image on the evolution of regional gaps.

## 2. THE LABOUR MARKET IN ROMANIA – CONVERGENCE OR DIVERGENCE?

The 1990s bring significant changes in the volume and structure of the main indicators of the labour market in Romania (Stanef, 2014, p. 62). In order to follow these changes, which can highlight regional convergence/divergence, in the following we analyse the following indicators:

### 2.1. Population employment

The population employment in Romania has steadily declined after the 1990s, mainly as a result of the massive economic restructuring. Currently, the population employment rate sets around 60%, under the level 70% established by the National Reform Programme 2015 necessary to achieve the objective EU2020 in terms of employment and fight against poverty. The population employment decreased in the period 1998-2013 by 282 thousand persons, from a total of 8812.6 thousand person to 8530.6 thousand persons. The interregional discrepancies on population employment can be noticed in the figure below. According to this figure, except for Bucharest-Ifov and West regions, all the other regions registered decrease in population employment.

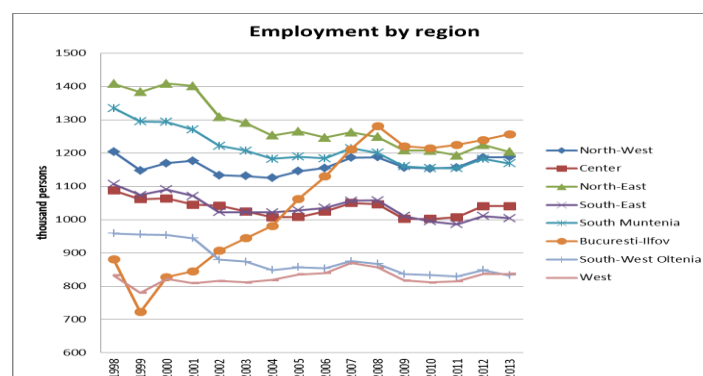


Figure 1: Population employment by regions (1998-2013)  
(Diagram drawn up by the author based on TEMPO-ONLINE data)

These disparities are highlighted as well by the influences of the national, sectorial and regional factors, on population employment decrease. The results of Shift-Share analysis are given below.

*Table 1: Shift-Share analysis by regions – employment (thousand persons)*  
(Own calculations based on TEMPO-ONLINE data)

Region	Absolute change of population employment 2013/1998 ( $\Delta ER$ )	Breakdown by factor of the absolute change of population employment:		
		National component (Nr)	Sectorial component (Sr)	Regional component (Rr)
North-West (NW)	-15,600	-38,515	-24,476	47,391
Center (C)	-47,200	-34,816	8,462	-20,846
North-East (NE)	-204,400	-45,059	-51,015	-108,326
South-East (SE)	-102,700	-35,411	-5,829	-61,460
South (S)	-166,400	-42,726	-54,321	-69,353
Bucharest-Ilfov (BI)	376,900	-28,160	150,071	254,988
South-West (SW)	-126,500	-30,672	-38,603	-57,225
West (W)	3,900	-26,643	15,711	14,831

The data presented in the table above indicate a decrease in population employment in 2013 compared to 1998 in the majority of the regions. Only Bucharest-Ilfov and West regions make an exception. The highest decrease was registered in North-East region (the poorest region in the country), over 204 thousand persons, and the lowest decrease in the North-West region, over 15 thousand persons. In Bucharest-Ilfov region the highest growth took place, with over 376 thousand persons. The national component affected negatively the absolute change of population employment in the period 2013/1998 for all of 8 regions. The sectorial component determined decrease in employment in North-West, North-East, South-East, South, South-West regions and growth for the other three regions (Central, Bucharest-Ilfov, West). The last three regions are specialized in branches of economy with rapid growth, and this is because the value of Sr is positive. The highest positive sectorial influence can be noticed in the case of Bucharest-Ilfov region. The regional component determined decrease in population employment for Central, North-East, South-East, South, South-West regions. North-West, Bucharest-Ilfov and West regions have a positive regional component combined either with a negative sectorial component (North-West region), or a positive sectorial component (Bucharest-Ilfov and West regions).

Interregional disparities exist as well in terms of population employment structure in the three big sectors: agriculture, industry and constructions and services. From this point of view important changes in this structure (see table 2) can be noticed. The first remark would be one related to the reconfiguration of the economic profile of regions from the perspective of population employment. In this sense a reorientation of the population employment from agricultural sector, predominantly in 1998 in the majority of the regions (except for Central and Bucharest-Ilfov regions) can be noticed towards the services sector. From this point of view the percentage decrease of population employment in the agricultural sector is significant for some regions. Thus, North-West region, predominantly agricultural, becomes a region with population predominantly employed in the services sector. The same happens in the case of South-East and West regions. The Central region is transformed from an industrial area into an area dominated by services. However, North-East and South-West regions still remain regions where more than 1/3 of population employment belongs to agriculture. As such, North-East,

South-West regions and as well Bucharest-Ilfov region continue to keep the economic profile. In Bucharest-Ilfov region the majority of the population employment can be found in the services sector, a sector which attracts in 2013 a greater part of the population (over 71% in 2013 compared to approximately 55% in 1998).

The second conclusion is related, on the one hand, to the downward trend of population employment in the agricultural and constructions sector, and on the other hand, to the upward trend of population employment in the services sector.

At Bucharest-Ilfov level both the greatest decrease of population employment (in industry and constructions: -13.52%) and the greatest increase (services sector: 16.25%) were registered.

Table 2: Population employment by sectors and development regions (%)  
(Own calculations based on TEMPO-Online data)

Region	Year 1998			Year 2013			$\pm\Delta$ 2013/1998		
	1	2	3	1	2	3	1	2	3
NW	41.72	29.99	28.29	30.13	29.92	39.94	-11.59	-0.07	11.65
C	31.50	38.15	30.35	22.89	33.88	43.24	-8.61	-4.27	12.89
NE	47.44	25.46	27.10	40.06	22.80	37.14	-7.38	-2.66	10.04
SE	41.44	27.17	31.38	32.26	27.16	40.57	-9.18	-0.01	9.19
S	44.37	30.65	24.98	35.86	28.23	35.92	-8.51	-2.42	10.94
BI	5.63	39.34	55.03	2.90	25.82	71.28	-2.73	-13.52	16.25
SW	47.76	25.87	26.36	38.86	25.61	35.53	-8.9	-0.26	9.17
W	34.00	32.33	33.67	23.78	34.25	41.97	-10.22	1.92	8.3

Legend: 1 - Agriculture; 2 – Industry & Constructions; 3 – All services

## 2.2. Activity ratio

To estimate the level of activity ratio we chose to calculate its variability indicators by total. The evolution of discrepancies can be observed in fig. 2.

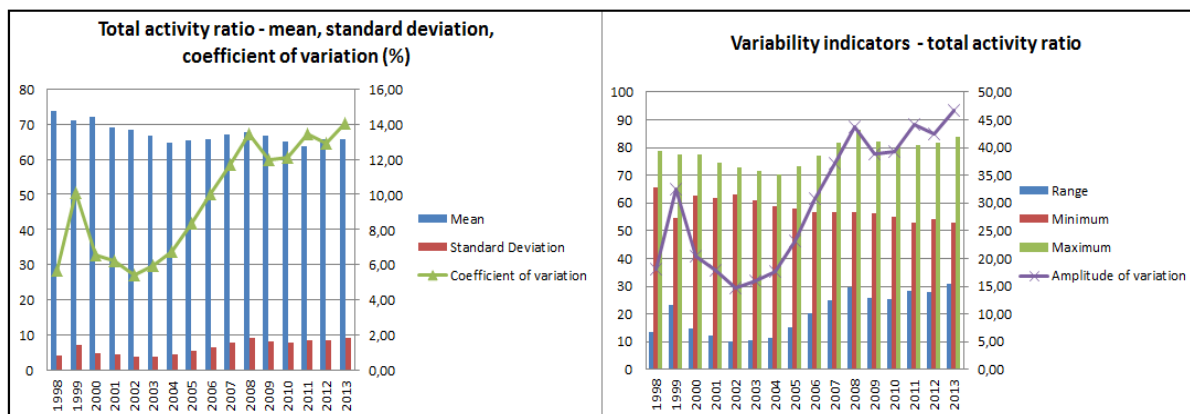


Figure 2: Variability indicators – total activity ratio  
(Own calculations based on TEMPO-ONLINE data)

With small exceptions, we observe a downward trend of standard deviation until 2004. In the last part of the analysed period the standard deviation was growing which implicitly meant a growth of the regional disparities in terms of activity ratio. The highest regional disparity was registered in 2013 (9.22% standard deviation). Similarly, the increase at regional level of the

amplitude of the activity ratio can be noticed. The greatest differences between the maximum and minimum values of the activity ratio are over 30% (in 2013, the difference between the Bucharest-Ilfov region-83.8% and North-East region-53.1%). From the point of view of interregional disparities, the indices (fig. 3) represent decrease for the interval 1999–2013 for certain regions (North-East, South-East, South Muntenia regions). For other regions, however, fluctuating trends can be noticed. In contract to the rest of the regions, Bucharest-Ilfov region moved away. Starting from 2007 it registered values over 120%. The North-East and South-East regions register values under the national level during the entire period. Other regions such as North-West, Central and West reach values over the national average. Gaps between maximum and minimum values related to the first and last years of the period are 1.2:1 (between North-West and Bucharest-Ilfov regions–1998) and 1.58:1 (between Bucharest-Ilfov and North-East regions). Similarly, noteworthy is the fact that between 1998 and 2001, Bucharest-Ilfov is the region with the lowest level of activity ratio, while in 2013 it registered the highest level.

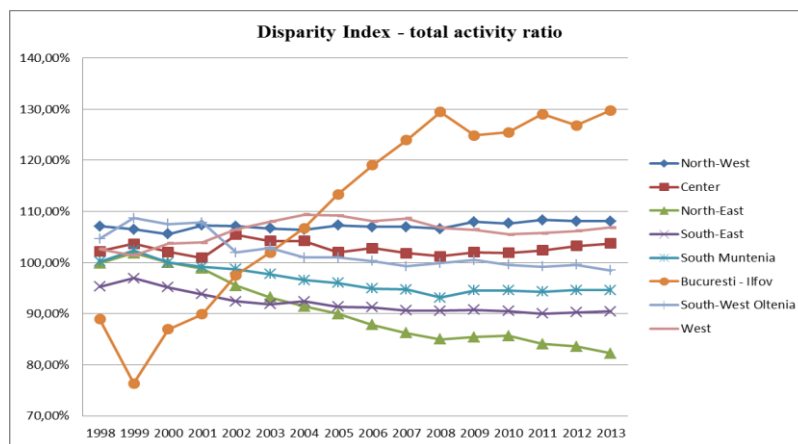


Figure 3: Disparity index – total activity ratio  
(Own calculations based on TEMPO-ONLINE data)

### 2.3. Average number of employees

The average number of employees dropped with 925,119 persons in 2013 compared to 1998. This decrease was generated both by national, sectorial and regional factors. Their influences are shown in the table below:

Table 3: Shift-Share analysis by regions – number of employees (persons)  
(Own calculations based on TEMPO-Online data)

Region	Breakdown by factor of the absolute change of population employment:			Absolute change of population employment 2013/1998 ( $\Delta ER$ )
	National component (Nr)	Sectorial component (Sr)	regional component (Rr)	
NW	-118,017	-5,049	29,443	<b>-93,624</b>
C	-121,843	-20,506	9,074	<b>-133,275</b>
NE	-125,147	1,772	-104,953	<b>-228,327</b>
SE	-114,614	947	-52,506	<b>-166,174</b>
S	-128,191	-29,434	-58,225	<b>-215,850</b>
BI	-134,756	56,588	211,692	<b>133,525</b>
SW	-85,785	-1,747	-48,505	<b>-136,037</b>
W	-96,766	-2,571	13,980	<b>-85,357</b>

According to the data included in the table above, except for Bucharest-Ilfov region, decrease in the number of employment took place all over the places. The highest decrease was registered in the case of North-East region, over 228 thousand persons, while the lowest decrease in West region, 85,357 persons. The national component affected negatively the number of employees in every region. The most significant decrease was registered in Bucharest-Ilfov region. The sectorial component influenced negatively five regions (North-West, Center, South, South-West and West), while North-East, South-East and Bucharest-Ilfov regions registered increase of employees as a result of the influence of sectorial factors. North-West, Center, Bucharest-Ilfov and West regions show regional advantages thus determining growth in the number of employees. As is can be noticed as well in the results of the Shift-Share analysis, Bucharest-Ilfov region significantly moves away both in terms of sector and region.

Distribution of employees by the five sectors (agriculture, industry, constructions, trade, services) within the regions is according to fig. 4. This allows us to point out the following: - the preponderance of employees in the services sector, especially in the last part of the period studied (just as in the case of population employment), at a significant difference compared to the industrial sector for the majority of the regions (North-West region, North-East region, South-East region, South-West region, South-Muntenia and Bucharest-Ilfov region); - the employees massive orientation towards the field of services in the case of Bucharest-Ilfov region and limitation of weight in the industrial sector (specialization of region in the field of services-over 55% of the employees in 2013); - specialisation of the Central and West region in the field of industry; - significant limitation of industrial activity in certain regions (North-East, Bucharest-Ilfov).

*Figure following on the next page*

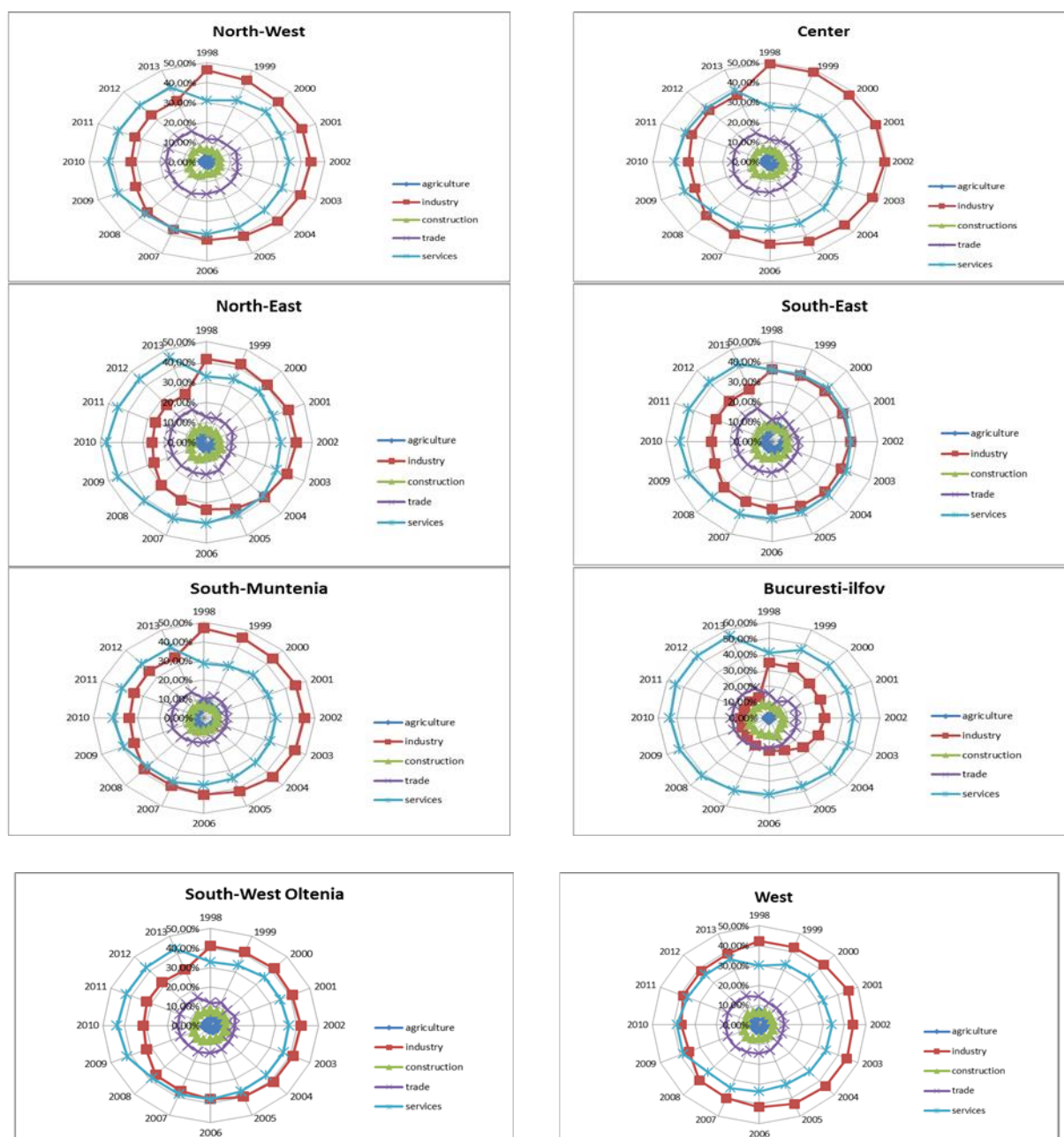


Figure 4: Distribution of employees by sectors and regions  
(Calculations and charts drawn up by the author based on TEMPO-ONLINE data)

## 2.4. Job vacancy rate

In case of job vacancy rate the period analysed included years 2005-2013, explained by the lack of statistical data. Fluctuating evolution of the rate (average, minimum and maximum values) can be noticed. Until 2008 inclusively, the regional convergence shows a decrease and increase the following 4 years. The last 2 years are characterized by the increase of interregional discrepancies from the perspective of job vacancies in economy. The regional poles are different from one year to the other. In general, these are the following: South-West Oltenia, North-West, South-East (for the lowest rates of job vacancies) regions and for the highest rates: Bucharest-Ilfov and North-East, West (in some years).

In terms of disparity index we can notice the same regional discrepancies. All regions show fluctuating evolutions. Nonetheless, there are regions of which disparity index exceed, in general, 100% (Bucharest-Ilfov, North-East, West, South-Muntenia), and others with values



under 100% (South-West Oltenia, Central, North-West, South-East). Extreme values are registered in 2010: 52.54% (South-East region) and 179.66% (North-East region). At the same time, the interregional differences in terms of job vacancies can be highlighted as well in the chart below:

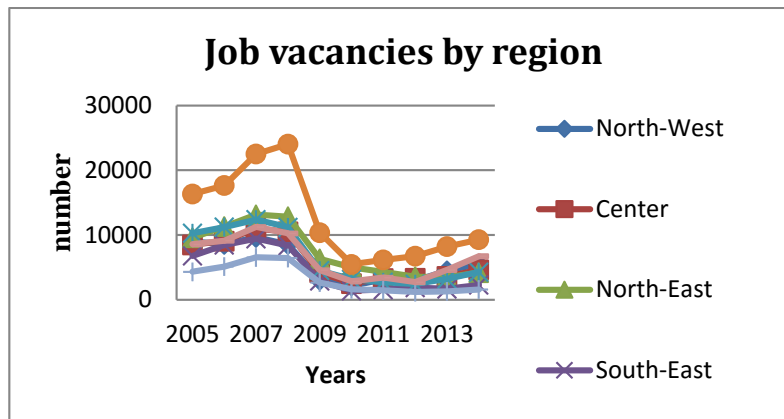


Figure 5: Job vacancies by regions (2005-2014)  
(Calculations and chart drawn up by the author based on TEMPO-ONLINE data)

As it can be noted, Bucharest-Ilfov region significantly moves away from the rest of the regions in terms of the total number of job vacancies. At the opposite pole we find South-West Oltenia region. The ratio between the two poles increased from 3.76:1 in 2005 to 5.82:1 in 2014. The job vacancies were distributed by the three sectors according to the data in the table below:  
Table 4: Job vacancies by sectors (2005-2013)

(Own calculations based on TEMPO-Online data)

Sector s	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
1	2,593	2,507	2,489	1,585	1,126	629	618	273	299	382
2	30,677	29,955	34,332	29,594	10,396	9,445	11,025	9,879	11,751	12,860
3	40,118	48,095	59,151	61,043	27,103	14,165	14,414	14,673	18,593	25,281
Total	73,380	80,557	95,972	92,222	38,625	24,239	26,057	24,825	30,643	38,523

Note: 1 - Agriculture; 2 - Industry& constructions; 3 - Services

We note that the peak economic years ensured the most job vacancies, up to approximately 96,000 jobs. Most of them were offered in the services sector and the fewest in the agricultural sector.

The situation by regions and sectors of job vacancies was the following: - In agriculture the most job vacancies were offered until 2009 inclusively, in the Central region, and then the most jobs were offered in North-East region; - In the industry and constructions sector North-West, North-East, Bucharest-Ilfov or West regions dominated successively. The fewest jobs in this sector were found in South-West Oltenia region; - Taken as a whole, services dominated the job vacancy market; - By regions, Bucharest-Ilfov significantly moved away from the rest, and in some years, at national level offered approximately 1/3 of the total job vacancies in services and sometimes even up to approximately 38% (in 2012) of this total.

## 2.5. Unemployment rate

According to fig. 6, except for the year 2002, until 2007, inclusively, we talk about a decrease of the interregional disparities in terms of unemployment rate. 2008 and 2009 mark, however, an increase of standard deviation (decrease of regional convergence), in the next two years a new decrease is registered, while in the last two years we identify an insignificant increase of dispersion. The same fluctuating evolution was registered as well in terms of the average value of the unemployment rate. Significant decrease is observed between 1999 and 2007, from 10.14% to 4.05%. In the last part of the period, the highest rate is registered in 2009, that is, 7.86%. In terms of extreme values, per overall period, the lowest value of the unemployment rate was of 1.7% (2007), registered in Bucharest-Ilfov region, while the highest value was reported in 1999 in North-East region, that is, of 14.9%. As expected, Bucharest-Ilfov region constantly reported the lowest values for this indicator. Concerning the maximum value, until 2004, North-East region registered the maximum value, and starting from 2005, its place was taken by South-West Oltenia region.

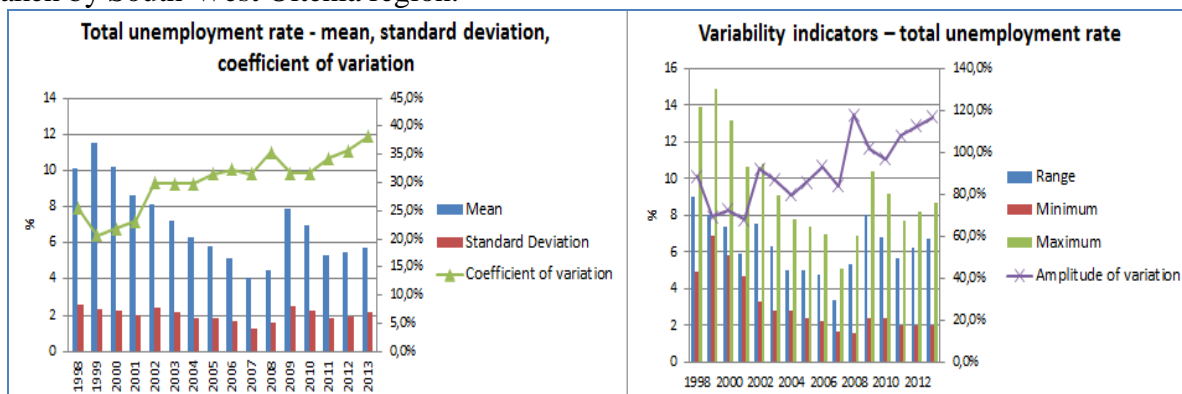


Figure 6: Variability indicators – total unemployment rate  
(Calculations and charts drawn up by the author based on TEMPO-ONLINE data)

Compared to the national average, 2 regions had constantly an index higher than 100% (North-East, and South regions), 2 regions (North-West and Bucharest-Ilfov regions) had constantly values lower than 100%, and the rest of the regions (Center, South and West) reported either lower values, or values higher than 100%. The regional poles were Bucharest-Ilfov (for minimum) and North-East in the first part of the period and South-West (for maximum) in the last part.

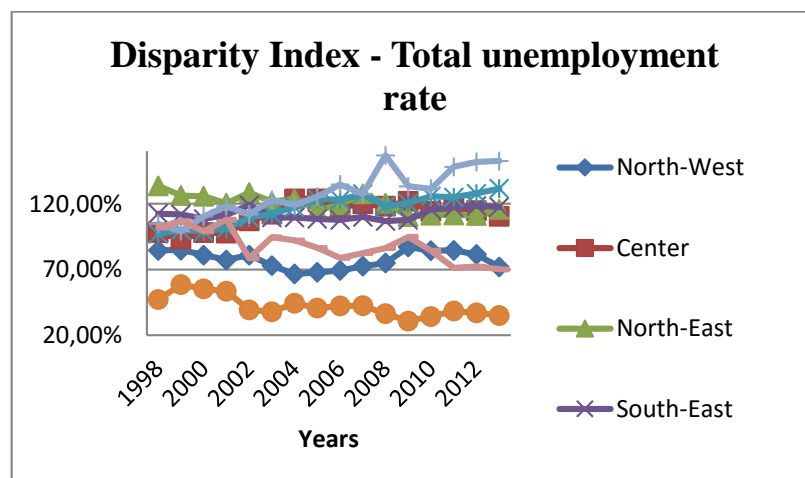


Figure 7: Disparity index – total unemployment rate  
(Calculations and chart drawn up by the author based on TEMPO-ONLINE data)



### 3. CONCLUSIONS

The results of the calculations allow us to conclude that the evolution of regional gaps was in general a sinuous one, marked by decrease and then, by increase. What catches attention is, however, the fact that in 2013 the interregional discrepancies were more or less high compared to 1998. As such, we talk in this case about the decrease of regional convergence in the Romanian labour market.

Another aspect which must be pointed out is related to the regional poles. For the best situations, for most of the time, Bucharest-Ilfov region moved away from the rest of the regions. This region occupied in general the best place. There were, however, situations when it ranked at the opposite pole for: population employment and activity ratio. Interesting is also the fact that in the case of population employment, North-East region occupied the best place for a long period of time. In the case of the lowest values, however, there were more poles. It is mainly the case of North-East region (activity rate, unemployment rate) and South-West Oltenia region (number of employees, job vacancy rate, unemployment rate).

We found out, furthermore, the significant orientation of the population employment and the number of employees towards the services sector determining this way changes of the economic profile for some regions.

The results of Shift-Share analysis for population employment and average number of employees pointed out the fact that Bucharest-Ilfov region registered the best evolution in terms of these indicators. Even if the national component influenced negatively their change, the sectorial and regional factors exercised a positive influence. Other regions which benefited from regional advantages apart from Bucharest-Ilfov were North-West, Center and West.

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## REGIONAL DEVELOPMENT IN THE WESTERN BALKANS THROUGH THE SUPPORT OF EU PROJECTS

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### ABSTRACT

*The paper shows how different support programs intended for institutions and organizations contribute to regional development and cooperation between the countries of the Western Balkans, as well as to higher economic development and prosperity of the region. Unfavourable economic and financial situation in most of the countries needs to be managed with more efficient use of external financial support, which usually in the case of the Western Balkans implies different EU programs. Such programs include the assistance in applying for CBC programmes, which further results in the development of the regional competitiveness through the implementation of joint projects. Such programs (CARDS 2000-2006, IPA 2007-2013 RSEDP2, IPA II 2014-2020) provide the financial support of the EU to resolve the issues of common interest (socio-economic, cultural and historical potentials) for neighbouring countries. The support programs should improve the institutional capacity of Serbia and strengthen the cooperation with the countries of the Western Balkans, which simultaneously implies alignment with European Structural Funds Regulations.*

**Keywords:** Regional development, EU programs, Western Balkans countries

### 1. INTRODUCTION

One of the main aims of the regional policy of the European Union is to contribute to the regional development, networking and cooperation of the countries in order to reduce economic and social differences between the member states on the one hand and on the other hand to encourage their economic development and prosperity. EU regional policy is the most important instrument for achieving so-called cohesion and involves adjusting to new trends, and large-scale restructuring (infrastructure development, reducing unemployment, stimulating industry and all forms of business activities) in order to enhance the competitiveness of local economy and thus equalize differences in the development of EU regions (Miric, 2009).

Since the creation of the European Economic Community (EEC) in 1958, the regional policy has had several stages (<http://www.regionalnirazvoj.gov.rs/>):

The first one lasted from 1958 to 1975 and its main feature was insufficiently focused approach to regional policy of the Community. The essential features of the second stage (1975-1986) were the creation of new instruments and strengthening of the existing ones, as well as a small but constant growth of available funds. The third stage was from 1986 to 1999. The main feature of the phase is reforming and increasing available funds, as well as improving the efficiency of the used instruments and resources. The fourth stage presents the period from 2000 to 2006. In this phase, the Agenda 2000 was prepared, which envisaged the biggest enlargement of the EU (May 2004), under which 10 countries became EU member states. The enlargement increased the population of the EU by 20% and gross domestic product (GDP) by only 5%.

The fifth stage covers the current budget period from 2007 to 2013. It is characterized by the biggest established amount of the funds intended for the poorest member states and regions and the focus is on faster economic growth, job creation and innovation.

Considering that EU emphasises regional cooperation as a key factor for economic development and prosperity of the countries, their political stability and security, in this paper we are going to show how various support programs intended for institutions and organizations contribute to regional development and cooperation between the countries of the Western Balkans.

For the Republic of Serbia, as a candidate for the membership in the EU, regional cooperation should not only be a formal precondition for the EU accession process, but the real indicator of the country's commitment to regional cooperation. Regional cooperation can be analysed through three components: economic (trade liberalization, improving the business environment etc.), safety (especially important for the Western Balkans) and political components (closely connected with the two previously mentioned ones).

For fast and sustainable economic growth and development, it is essential to consider both social and economic benefits, but also identify shortcomings and weaknesses. Primarily, one of the most serious problems is the fact that the Republic of Serbia lags behind EU standard in a number of aspects (the average GDP per capita, unemployment, infrastructure ...). Additionally, there is uneven development of individual territories. It is clearly seen between the underdeveloped (rural, mountain and border areas) and developed areas of the Republic of Serbia, which directly affect and result in undesirable economic, social and demographic consequences. The importance of the issue is furthermore stressed in the Constitution - "The Republic of Serbia develops balanced and sustainable regional growth in accordance with the law" (article 94 - Balancing development), and article 97 which states that the jurisdiction of the Republic of Serbia is to regulate and ensure "the development of the Republic of Serbia, policy and measures for boosting balanced development of particular areas of the Republic of Serbia, including the development of underdeveloped areas as well; organization and the use of area; scientific and technological development" (paragraph 12 of the Constitution).

The problem of underdeveloped areas as well as critical review of the current policy of regional development, are presented in the adopted Strategy of regional development for the period 2007-2012 and Strategy of regional development of the Republic of Serbia. In 2009, according to the Law on Regional Development, a new framework and improved regional development policy of the Republic of Serbia was created. Actually, at the beginning of EU accession process, there was the obligation to create a legal framework in which this could be implemented, as well as to handle the issue of available incentive mechanisms, such as pre-accession funds (IPA), grant development assistance from the international community and other international sources of aid, which are in accordance with the law.

## **2. EU SUPPORT PROGRAMS**

In order to support and strengthen the cooperation between the countries of the Western Balkans and the EU member states, based on the experiences of the countries that have become the EU member states, participation in EU support programs has turned out not only as a great strategy for the EU accession process, but also as a great contribution to the economic and political progress of the countries that use them.

The significant role of EU regional policy towards the Western Balkans in terms of region stability and their individual joining the EU, has been confirmed through the Stabilisation and Association Process, which was particularly emphasised at the EU summit in Thessaloniki in 2003.

During the process of harmonization with the general European standards and norms, the Western Balkan countries are facing a number of common problems (the return of refugees, infrastructure reconstruction, economic development and organized crime...) as well as cross-border issue (<http://www.regionalnirazvoj.gov.rs>). Therefore, the EU encouraged the countries of the region to promote regional cooperation by the implementation of Neighbourhood programs and cross-border cooperation program (INTERREG - Interregional cooperation).

Cross-border cooperation has two modalities. The first one is the cooperation with the member states and the other one cooperation between the countries of the Western Balkans. The modalities differ according to the rules of project implementation. The CBC program, which is implemented between EU member states and candidate countries in the budget period 2007-2013, implies using also the funds intended for potential project applicants. The financial resources for the member states are taken from the European Regional Development Fund (ERDF). The financial resources for the program participants who are candidate countries are provided from other components - the Instrument for Pre-Accession Assistance (<http://www.regionalnirazvoj.gov.rs>).

*The Instrument for Pre-Accession Assistance (IPA)* combines all the programs to help the countries that wish to join the EU and has two main aims: to assist beneficiary countries in meeting the political, economic and criteria relating to the Adoption of the Acquis, and the other one is to build administrative capacity and strengthen the judiciary and preparation process for the use of structural and cohesion funds after the EU accession (<http://europa.rs/>).

*Community Assistance for Reconstruction, Development and Stabilisation (CARDS)* is the EU program, also designed for the Western Balkan countries, which were in the stabilization and association process. The program was used in the period from 2000 to 2006 to develop institutions and legislation, sustainable economic and social development, regional and cross-border cooperation among the countries of the Western Balkans and the EU member states.

*Regional Socio-Economic Development Programme (RDEPR 2)* is the EU technical assistance program aimed at supporting regional development agencies in the Republic of Serbia. Technical assistance consists of four key components: the support to regional development agencies and local and regional participants, inter-municipal cooperation, learning and support to the Grant Scheme (<http://www.regionalnirazvoj.gov.rs/>).

In addition to the support programs of the EU, we are going to present the other financial EU programs in which the Republic of Serbia participates (Bass, Knezevic, Dragojlovic, 2014): *Horizon 2020* / *Horizon 2020* is a new EU program for research and innovation. The program is an instrument for achieving the main goals of the Europe 2020 strategy, and above all its Innovation Union initiative.

*The Programme for the Competitiveness of Enterprises and SMEs / COSME* - COSME aims to encourage competitiveness and sustainability of entrepreneurship in the EU, in particular small and medium-sized enterprises, as well as support entrepreneurial culture and the promotion of creativity and the development of SMEs.

*Employment and Social Innovation Programme EaSI* / The programme aims to support social policy and employment policy in the EU. The program supports the efforts of the member states in the design and implementation of social reforms and reforms in the field of employment at European, national, regional and local level through the identification, coordination, analysis and exchange of best practices.

*Erasmus+*. Erasmus+ programme is aimed at highlighting the skills and employability, as well as the modernization of education, training and jobs for young people. Erasmus+ can help 4 million European students to be trained, gain professional experience and volunteer abroad. Erasmus + supports transnational partnerships between education, training institutions and youth institutions and organizations in establishing co-operation in the world of education and work to bridge the gap regarding qualifications that Europe is facing. As for sports, basic projects and cross-border challenges such as the fight against match-fixing, doping, violence and racism are supported.

*Connecting Europe Facility (CEF)* / Connecting Europe Facility supports the development of sustainably, effectively related trans-European networks (TEN) in the fields of energy, telecommunications and transport exceptional characteristics. CEF enables the construction of those projects. Without CEF contribution it would not be possible to implement all this. The aim is also to minimize administrative barriers and maximize participating funds from the EU budget in order to promote synergies.

*Copernicus* / Copernicus is a European system for observing the Earth. It is a civilian program focused on the needs of users, built on the existing national and European facilities. It provides regular observation and monitoring of the Earth's subsystems - the atmosphere, oceans, and continental surfaces and provides reliable and verified information to protect the environment and civil security.

### **3. PROGRAMS AND DEVELOPMENT OF THE WESTERN BALKANS - ANALYSIS**

One of the major political and economic projects of the EU, as a strategic framework [European Parliament (Article 218 (6) TFEU and Article 49 TEU)]<sup>1</sup>, is the integration of the Western Balkan countries (WBC)<sup>2</sup> in the EU, through the process of cooperation and support in order to ensure stability and development in the region.<sup>3</sup> This is a remarkable project, which is politically and economically designed to ensure stability and development in the region.

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<sup>1</sup> In the preamble of the Treaty of Rome (1958) it is outlined that the EU Member States should "reduce the differences existing between the various regions and the backwardness of the less favored regions."

<sup>2</sup> Western Balkans include the candidate countries Albania, the Former Yugoslav Republic of Macedonia, Montenegro and Serbia, as well as potential candidate countries Bosnia and Herzegovina and Kosovo\*. They all have the perspective of joining the European Union.

<sup>3</sup> "In order to promote the overall harmonious development, the European community will develop and perform the activities that lead to strengthening its economic and social cohesion. The Community will in particular aim to reduce the disparities between regions and the backwardness of the less privileged regions, including rural areas" (Article 130a, the Single European Act, 1986)

The overall cooperation between the EU and the Western Balkan region is reflected through the following instruments: 1. The Stabilisation and Association Process (SAP) - a strategic framework that supports the gradual rapprochement of the Western Balkans with the EU, and is based on bilateral contracts, financial assistance, political dialogue, trade relations and regional cooperation; 2. The accession process - the candidate countries and potential candidate countries receive financial assistance to implement the necessary reforms and fulfil the Copenhagen political criteria; 3. Regional cooperation - encourage countries in the region to cooperate in a wide range of areas; 4. The visa-free regime - enables the citizens of the region to travel without visas in the Schengen area. The instruments imply the appropriate financing methods.

The approach, closely monitored by the EU, implies active defining of national development strategy, which would adequately combine the regional aspect with the EU regional policy. This allows more appropriate use of assistance from the Structural Funds, and the willingness of the other member states to allocate the funds for interregional redistribution as a support mechanism for alleviating the existing territorial differences and better utilization of development resources that can be used by entering the EU.<sup>4</sup> Hence, it is essential that a country plans the national budget that should be regional and sector-oriented, in the sense that it contains priority classification and the measures for sectorial and regional implementation strategy, as well as funding resources. Therefore, there is a significant increase in funding sustainable development in this area from its own resources (and in accordance with the actual and available capabilities), especially with the recovery of the economy and a greater degree of macroeconomic stability.

The main task of all the Western Balkans countries are bilateral resolutions of border disputes, signing and implementation of the Free Trade Agreement, establishing cooperation in the fields of energy, transport and other areas. The European Union pays attention that the process takes place in accordance with the *acquis* and supports the association process through various programs.

EU assistance through the IPA program is designed as a unique and coherent assistance instrument, but the Regulation on the establishment of IPA<sup>5</sup> makes a difference between the beneficiary countries, from the aspect of owning a decentralized system of funds (Turkey, Croatia, Montenegro and Macedonia through all 5 components) and not-decentralized system of funds (Serbia, Kosovo<sup>6</sup>, Bosnia and Herzegovina and Albania through the first two components). In this context, the assistance is provided through the components IPA 2007-2013: (1) Transition Assistance and Institution Building; (2) Cross-border cooperation, (3) Regional Development, (4) Human Resources Development and (5) Rural Development. The focus of the programme is to assist countries in meeting the political, economic, and criteria relating to the Adoption of the *Acquis*, as well as building of administrative capacity and strengthening the judiciary, as well as to prepare for the use of the structural and cohesion funds from the EU with full membership in the EU.

In order to provide the possibility of financing from pre-accession funds to the region (PHARE, ISPA, SAPARD and CARDS), by the European Council Regulation no. 1085/2006 from July

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<sup>4</sup> Regional Development Strategy of the Republic of Serbia from 2007 to 2012, p. 75.

<sup>5</sup> [http://www.esteri.it/mae/resource/doc/2015/02/reg\\_ec\\_718\\_2007.pdf](http://www.esteri.it/mae/resource/doc/2015/02/reg_ec_718_2007.pdf)

<sup>6</sup> Resolution 1244

2006, a new pre-accession instrument (IPA - Instrument for Pre-accession Assistance<sup>7</sup>) was established. According to the National Strategy for Sustainable Development of Serbia<sup>8</sup> "funds from the EU pre-accession assistance (IPA) are also largely directed towards sustainable development. The resources are mainly allocated to the projects supporting refugees and displaced persons, regional and social development projects, health care reform, reduction of greenhouse gas emissions from the power plant Nikola Tesla and the others. The total funds directed to sustainable development that had already been defined in the IPA 2007 amounted to EUR 71 million or about 40% of all the funds available from the IPA program. "For the period 2007-2013 the financial value of the IPA programs amounted to about EUR 11.468 billion, of which the Republic of Serbia received EUR 1.4 billion. During the period the candidate countries (Croatia and Macedonia) had available funds for all five components from IPA while potential candidates (Republic of Serbia, Montenegro, Bosnia and Herzegovina and Albania) had only two out of five components: (1) transition process support and institution-building in line with the acquis, and (2) regional and cross-border cooperation.<sup>9</sup>

*Table 1. The allocation of IPA funds defined by Multi-annual indicative financial framework (MIFF), the Western Balkans, 2007-2013, million euros*

	2007	2008	2009	2010	2011	2012	2013
<b>Albania</b>	61.0	70.7	81.2	94.1	94.4	94.5	98.1
<b>Bosnia &amp; Herzegovina</b>	62.1	74.8	89.1	105.3	107.4	107.8	111.8
<b>Croatia</b>	141.2	146.0	151.2	153.5	156.5	156.1	95.4
<b>The former Yugoslav Republic of Macedonia</b>	58.5	70.2	81.8	91.6	98.0	101.8	117.2
<b>Kosovo*</b>	68.3	184.7	106.1	67.3	68.7	68.8	73.7
<b>Montenegro</b>	31.4	32.6	34.5	33.5	34.1	35.0	35.4
<b>Serbia</b>	189.7	190.9	194.8	197.9	201.8	202.0	214.7

*Source: EU Delegation in Serbia*

*Note: In addition to the Western Balkan countries, a large proportion is for Turkey, then to multi-beneficiary programs, and a small part for Island.*

The EU determined the planning process of funding by a Multi-annual indicative financial framework (MIFF). Out of all the funds from the IPA pre-accession assistance for the Western Balkan countries, excluding Turkey and Iceland, the majority of the funds was used for the programmes in the Republic of Serbia. It is more than ¼ of the total funds budgeted.

The idea of the second component of the IPA is to strengthen cross-border cooperation, create joint local and regional initiatives that aim to promote sustainable economic and social development in many areas, such as: environment, natural and cultural heritage, public health, prevention and the fight against organized crime, ensuring efficient and secure borders and the promotion of joint small-scale actions involving local participants from the border regions. The

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<sup>7</sup> Serbia will be a beneficiary of the IPA program funds from 2007 until EU membership, on the basis of a decision of the Council in Brussels in June 2006.

Link:[http://europa.rs/upload/documents/1\\_21020060731en00820093.pdf](http://europa.rs/upload/documents/1_21020060731en00820093.pdf)

<sup>8</sup> National Strategy for Sustainable Development of Serbia, page 124.

<sup>9</sup>The remaining three components are: (3) regional development - infrastructure investments; (4) human resources development; and (5) rural development. Serbia, although being a potential candidate country in 2009, began the preparations to use the remaining three components.



Republic of Serbia could use more than EUR 70 million through the projects (just below Croatia).<sup>10</sup>

In the Republic of Serbia, the basis of cooperation with the countries of the Western Balkans was set in implementation period of EU assistance under the CARDS programme (2000-2006). CARDS program dates back to 2000 from the idea of support to the Western Balkans in the Stabilisation and Association Process (SAP). In the period 2000-2006, the program provided EUR 4.6 billion for investment, institution building, and other measures. The main objectives of the program were: (1) democratic stability, (2) institutional and legislative development, (3) sustainable economic development and (4) improving the relations in the region. The entire program was conducted under the Economic Agency for Reconstruction (EAR), which was responsible for the program in the Republic of Serbia.

Realized CARDS programs in the Western Balkans contributed to: (1) the construction of institutions and improved legislation; (2) the development of a market economy, with the investment in vital physical infrastructure and a higher level of environmental protection, and (3) democratic stabilization, social development and strengthening of civil society. CARDS regional and national programmes were supplemented in the areas of institution building, justice and internal affairs, environment protection, integrated border management, transport, civil society, etc.

According to data of the EAR, since 2000 when financial support to the Western Balkans region began, a lot of progress and success has been made.

*Table 2. EAR funds, until July 2007*

	<b>Appropriated (1)</b>	<b>Contracted (2)</b>	<b>(2)/(1)</b>	<b>Paid (3)</b>	<b>(3)/(1)</b>
<b>Serbia</b>	1,3 mlrd e	1,1 mlrd e	87%	921 mil e	71%
<b>Montenegro</b>	130 mil e	121 mil e	93%	104 mil e	80%
<b>Kosovo*</b>	1,11 mlrd e	1,07 mlrd e	96%	998 mil e	90%
<b>The former Yugoslav Republic of Macedonia</b>	327 mil e	296 mil e	91%	259 mil e	79%
<b>Total EAR</b>	2,86 mlrd e	2,6 mlrd e	91%	2,3 mlrd e	80%

Through these funds the Republic of Serbia has managed to improve institutional capacities, agriculture, energy sector, health care, higher education facilities, as well as human rights.

Chronologically speaking, the Reconstruction Agency in Serbia started activities in December 2000 through emergency program (amounted to EUR 182 million). In 2001 (with EUR 193 million) there were a couple of medium-term and long-term investments in the key sectors of energy, health, agriculture and entrepreneurship. Such support was deepened in 2002 (with EUR 168 million) through economic development, improving governance and legislation, including the projects for recovering weakened infrastructure, the support to small and medium-sized enterprises (SMEs), the help to the reforms and the support to independent media and civil society. In 2003 (EUR 216 million euros) the activity of support and improvement of public finance, justice and internal affairs and administrative decentralization was present. In the following two years 2004 (EUR 206 million) and 2005 (EUR 152 million) the stress was

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<sup>10</sup> Serbia in the European integration process, Serbia European Movement

on the support to European integration, the harmonization of institutions and regulations with EU standards.

Serbia has participated in numerous projects of the Western Balkans Investment Framework (WBIF), which was launched in December 2009 as a regional tool for the expansion of the European Commission. It supports socio-economic development and EU accession across the Western Balkans by providing financial and technical support for strategic investments. The framework increases the capacity of the region for financing key infrastructure and priority investments in line with the priorities of the accession and improves overall coordination assistance.<sup>11</sup> Since 2009, Serbia has been connected to the total of 34 projects (6 regional and 28 national). These projects were sector-focused on the transport sector, environment sector, companies sector and energy sector.

Through the Western Balkans Investment Framework in 2012, further promotion of regional cooperation and reconciliation in the Western Balkans continued. In addition, the EU assists countries through advice policy and financial assistance and support to the investments essential for the boost of economy growth and job creation. In that year WBIF supported 137 projects with approved grants in the amount of EUR 237 million and the total investment value of EUR 13 billion. The grants were approved in the amount of EUR 54.8 million to Bosnia and Herzegovina, EUR 44 million to Albania, EUR 34.3 million to Serbia, 30 million to Kosovo\*, EUR 16.9 million to Macedonia and EUR 15.1 million to Montenegro. The largest part is related to the energy sector (with 55%), followed by society and transport sector (17%), environment sector (9%) and private sector development (2%). In addition, such projects benefited all the Western Balkan countries in the region with (49%) - Bosnia and Herzegovina (16%), Macedonia (9%), Kosovo \* (8%), Serbia (6%), Montenegro (2%).

Slovak experience, after ten years in the EU, has shown that Slovak economy economically strengthened, but that the absorption capacity of EU funds is rather weak (until 2015 it spent about 60% of planned EU funds). The key benefit of the membership reflected in the reform of tax system administration, health care and pension system. It is similar with Hungary, which strengthened both economically and politically. Without financial support from the EU these results would not have occurred. However, there is a problem in the distribution of EU structural funds. The Poles have gone furthest - economic development, unemployment decrease, standard quality improvement and the increase of social equality of the citizens, as well as the strengthening of Polish political influence in the EU. The outcome of these results lies in the creation of adequate administrative capacity, long-term strategic planning, accelerated export and successful cooperation.

In addition to these programmes, it is necessary to mention the European Instrument for Democracy and Human Rights, Erasmus Mundus and Tempus programmes.

The Republic of Serbia in competitions through the European Instrument for Democracy and Human Rights (EIDHR) in the period 2005-2009 gained over EUR 50 million. The objective of the EIDHR programme is to strengthen the role of civil society in promoting human rights and democratic reforms, supporting efforts to prevent conflict and consolidate its participation and representation in politics.

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<sup>11</sup> 2012 Annual Report, The Western Balkans Investment Framework, page 5.

The Erasmus Mundus programme is an important programme concerning the support to the cooperation and mobility in higher education by promoting high-quality European master and doctoral studies. The programme aims to improve the quality of higher education and intercultural understanding through the cooperation with partner countries, as well as a greater degree of regional cooperation in the field of higher education. Erasmus Mundus was in the first phase implemented in the period 2004-2008, while the second phase lasted from 2009 to 2013.

In addition to the above programs in the field of higher education, it is important to mention the Tempus programs, which date in the various forms from 1989, all the time aiming to provide assistance to partner countries in the non-imposed acceptance of the development trends of EU higher education, and which originate from the Lisbon agenda and the Bologna process. The last phase, Tempus IV was implemented in the period 2007-2013. One of the main goals of the program is to improve the higher education system and its correlation with the labour market, as well as build the capacity of higher education institutions that can maintain the continuous process of modernization and international cooperation. Tempus programmes have special domain in the area of the Western Balkans - not only through the process of cooperation, but also in customizing Lifelong learning programme.

All the activities in the EU have enabled the Republic of Serbia to be proud of successful analytical review (March 2015) of the *acquis communautaire*. Furthermore, it can be pleased with the progress in achieving legal and economic criteria, immense progress has been made due to the adoption of a comprehensive action plan.<sup>12</sup>

#### **4. CONCLUSION**

The aim of the regional approach, as a part of the integrated policy is to promote peace, stability and sustainable development in the Western Balkans. Through the regional support programs, the EU is trying to simplify the access to loans by pooling and coordinating different sources of funding and technical assistance.

The idea of EU support programs is the improvement of regional and local networks of basic infrastructure (transport, energy and environment), including social infrastructure, as well as the support to the private sector, with more investment in health and education sectors. All the activities are organized to improve access to financing SMEs, encourage development of the local economy and regional risk-free capital market, and try to promote the access to finances through financial engineering instruments. The approach (establishing joint grant and the possibility of joint loans) is a good basis for further investment in the region in the coming years, and it enables rapid development of the economy.

The priority of the EU is the integration and maintenance of these regional support programmes. By raising the efficiency and flexibility, and through active regional stimulation of the others, first of all, neighbouring countries, the region would give a positive contribution to the overall EU market.

This kind of cooperation is of great interest to both the EU and the Western Balkans. This is a key factor for establishing political stability, security and economic prosperity of the region and it opens the perspective of integration of the Western Balkans into the EU.

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<sup>12</sup> Serbia Report 2015, European Commission, 10.11.2015. pp. 72-73

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## THE EVER CHANGING EUROPEAN UNION

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### **ABSTRACT**

*Serbia is in serious negotiations with the EU to give evidence concerning the fulfillment of conditions to join the European Union.*

**Keywords:** *European Union, negotiations, Serbia*

### **1. INTRODUCTION**

Although the main areas of joint economic policies within the European Union have been seriously improved recently, it turns out that additional improvements of some joint economic policies are necessary.

For example, a Bruegel Policy Contribution clearly shows that, within the European semester, recommendations for the Euro area, as a whole, were poor in 2011 and had deteriorated since (Darvas Z., Leandro A. (2015), The Limitations of Policy Coordination in the Euro Area Under the European Semester, Bruegel Policy Contribution, issue 2015, 19.November 2015. p. 01).

The European Semester is not effective at enforcing even the EU's fiscal and macroeconomic imbalance rules.

Euro area recommendations issued to member states are not well reflected in the recommendations issued to the member states.

The establishment of an independent advisory European Fiscal Board could increase transparency and foster the debate about fiscal policies in the Euro area (Darvas Z., Leandro A. (2015), The Limitations of Policy Coordination in the Euro Area Under the European Semester, Bruegel Policy Contribution, issue 2015, 19. November 2015. p. 03). The European Semester has a legal basis and should be used for policy coordination.

### **2. CENTRAL BANKS AND QUANTITATIVE EASING**

Since the beginning of the Central Bank's quantitative easing programme, 2015, it became clear that the original guidelines would have constrained the programmes implementation (Benassy-Quere A., Ragot X., Wolff, G. B. (2016). Title: Which Fiscal Union for the Euro Area? Location: Bruegel Policy Contribution, issue 2016, 05.February).

In March 2017 the European Central Bank decided to continue with the asset purchase programme, until we see a sustained convergence towards our objective of a rate of inflation which is below but close to a rate of inflation, which is below but close to 2 percent.

### **3. WHICH FISCAL UNION FOR THE EURO AREA**

Fully fledged federations assign fiscal policy stabilization mainly to the federal level based on a relatively large budget. In the Euro area a large federal budget is unrealistic at the current level of political and social integration and fiscal stabilization will continue to rely mainly on national policies.

National fiscal policies could be used for stabilizing with respect of the economic cycle. Sovereign debt restructuring shall be made possible by strengthening the banking sector and the European Stability Mechanism. The Stability and Growth pact should be able to shift

incremental investment and unemployment spending from bad to good times. Federal insurance for very large shocks should be based on automatic stabilizers.

In 1977 it was suggested to complement the European Monetary Union with a small budget of around 5 to 7 percent of GDP. In 2010 the European Financial Stability Fund and the European Stability to correct geographical or historical disadvantages, ensure macroeconomic stabilization.

Mechanism was established. Those institutions are expected to finance public goods common to all regions to carry out transfers between regions to correct geographical or historical disadvantages, ensuring macroeconomic stabilization. The small EU budget has so far been entirely devoted to the first two objectives.

From the point of view of other countries and the world economy, the European Union including all countries using the euro, is important in covering and managing one important part of the world economy and represents a large group of countries important for the world economy.

The euro area began to equip itself with the Banking union and with the running of fiscal and macroeconomic surveillance.

A “federal” budget of the European Union is necessary to provide for macroeconomic stabilization including the member states. Since a federal budget would have to be financed by the “federal” states, it is not to be expected in the near future. Therefore, macroeconomic stabilization should be achieved through the smooth functioning of the national budgets controlled by the national governments. That asks for their agreement about the 19 national policies. If fiscal policies are loosened, that will trigger monetary policy tightening. In a situation when monetary policy is constrained, fiscal policy would need to increase demand. These interrelations ask for coordination of fiscal policy by the euro area member states.

National fiscal policies have to be able to restore the ability of national budgets to be stabilizing at the country level and to contribute to macroeconomic stabilization at the aggregate level when needed.

There are strong arguments in favor of fiscal policy by the 19 euro area member states and between them and the European Central Bank. Until recently fiscal policy coordination used to be unsatisfactory. The euro area’s fiscal policy has not played its macroeconomic stabilization role since 2008. There is still no possibility to have a desirable fiscal stance to be distributed to the member states, and ensure sound fiscal policies.

European unemployment insurance and labor market convergence are also to be taken into account. The unemployment insurance scheme would intervene only in very bad times only to extend the duration of the insurance period, with a financing by the state.

It seems that a common currency without a common fiscal policy is not viable. Although moving the euro area to a fully fledged federation would take a long time, in the meantime it is urgent to reinforce the single market and to correct the tendency of national fiscal policies to be pro-cyclical in good and bad times.

#### **4. THE EURO ZONE NEEDS LESS HETEROGENEITY**

Misalignments of real exchange rates are typically the most visible and painful symptom of asymmetric shocks. Deviations of wage growth from labor productivity growth tend to create adjustment problems in a monetary union and should be closely monitored and corrected before they become protracted and painful to adjust. The nominal exchange rates could be used to correct for losses in competitiveness.

The loss of the nominal exchange rate instrument does not imply that real exchange rates cannot appreciate or depreciate. The competitiveness adjustment risks being long and painful given the loss of the nominal exchange rate instrument.

One solution could be to harmonize wage-setting systems which have deep historical, political and social roots. The alternative is to broadly maintain the existing systems but to constrain their functioning to ensure that they produce outcomes which are compatible with membership of a monetary union and the need to avoid persistent real exchange rate misalignment.

A. Sapir makes it clear that the EU has no fiscal instruments capable to correct liquidity problems of most EU countries since there is not, or not enough fiscal insurance.

The IMF estimates that, Canada, the US, or Germany manage to smooth 80% of local shocks, with 25% of it in Canada, 15% in the US and only 10% in Germany.

The EU established the European Financial Stability facility, replaced by a permanent reserve mechanism, the European Stability Mechanism. It is still far from sufficient to provide the necessary adjustment within the Euro zone.

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## ENVIRONMENTAL KUZNETS CURVE HYPOTHESIS IN BRICTS: THE ROLE OF TOURISM

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### ABSTRACT

*Kuznets (1955) predicted that the changing relationship between per capita income and income inequality is an inverted-U shaped curve. Kuznets Curve says that as per capita income increases, income inequality also increases at first and then starts declining after a turning point. In the 1990s, Kuznets Curve hypothesis is started to apply the relationship between environmental quality and per capita income. According to this hypothesis which is called Environmental Kuznets Curve (EKC), firstly as per capita income increases, environmental degradation also increase and then starts declining after a turning point. Generally, the relationship between economic growth, energy consumption and environmental degradation has been investigated for testing EKC hypothesis. However, some sectors stimulate economic activity. Tourism sector is one of the most important sectors which not only contribute to an economy, but also other sectors. Tourism development has increased energy demand and urbanization. These activities cause environmental pollution. As a result, the relationship between tourism and environmental pollution is significant for policymakers and researchers. In this study, it is examined the relationship between per capita CO<sub>2</sub> emissions, real per capita GDP, per capita energy consumption, trade openness rate and the number of international tourists who visit BRICTS countries over the period from 1995 to 2011 in order to test connection between tourism and carbon emissions using the EKC framework. Pedroni (2009) cointegration test is used to determine the relationship. The results reveal that there is a cointegration relationship with between CO<sub>2</sub> emissions and independent variables. Tourist arrivals and economic growth have a negatively effects on CO<sub>2</sub> emissions. In contrast, trade openness decreases the emissions in BRICTS countries.*

**Keywords:** BRICTS countries, EKC, Tourism.

### 1. INTRODUCTION

In recent years, one of the most frequently discussed global issues has been environmental degradation in the context of global warming and climate change. It is the main cause of global warming and climate change that rapid rise in gases that causes greenhouse effect in the atmosphere. The main gas causing greenhouse effect is carbon dioxide emissions (CO<sub>2</sub>) that emitted into atmosphere by using fossil fuels such as petroleum, coal and natural gas. With the advents of Industrial Revolution, economic development is first target for many countries. This aim has increased energy demand and this need has been met greatly from the fossil fuels. Because of climate change and global warming, the search for relationship between environmental pollution, economic growth and energy use has been investigated in the framework with EKC hypothesis. However, there is limited research investigating the



relationship between environment and economy to specific sector of the economy. Tourism is one of the most important sectors which not only contribute to the economy, but also other sectors.

Tourism sector can cause environmental pollution like any other sector. Tourism development leads to an increase in energy demand. In addition, an increase in tourism activities comes with an increase demand in infrastructure such as roads, airports, and different tourism services. Because of these reasons, it is expected that tourism development can induce large pressure on environment. The economic attractiveness of the tourism sector has caused to be ignored its relationship with the environment for long years. Because of the impact of income and employment opportunities in developing countries, government has provided various financial facilities to investors. As a result of rapid and unplanned investments in tourism sector, natural and cultural environmental degradation can increase.

In this study, the relationship between economic development, tourism development and environmental pollution will be examined in the context of the EKC hypothesis for BRICTS countries. The concept of BRICTS is accepted as countries at a similar stage of newly advanced economic development. The economies of these countries have been growing more rapidly for last decade. In addition to economic growth, the number of international tourists' arrivals in these countries has grown approximately 3 times for last decade. Therefore, the tourism induced-EKC hypothesis will be analyzed for BRITCS countries by utilizing panel data analysis.

The rest of the paper is as following; Second section involves the literature review, Third section describes the data, model, methodology and empirical findings, Fourth section presents the conclusion and policy implications of the study.

## 2. LITARATURE REVIEW

Kuznets (1955) predicted that the changing relationship between per capita income and income inequality is an inverted-U shaped curve. Kuznets Curve says that as per capita income increases, income inequality also increases at first and then starts declining after a turning point. In the 1990s, Kuznets Curve hypothesis is started to apply the relationship between environmental quality and per capita income. In recent years, Environmental Kuznets curve hypothesis is analyzed intensively due to increasing environmental incidents and economic crisis. The hypothesis was firstly tested by Grossman and Kruger (1991). Stern (2004), Coondoo and Dinda (2002), Dinda (2004), Luzzati and Orsini (2009), Halicioglu (2009), Acaravci and Ozturk (2010) studies provide an extensive literature on EKC hypothesis. In these studies, the relationship between environmental pollution and economic growth was tested. In addition, the relationship between environmental degradation, economic growth and energy consumption was analyzed by Richmond and Kaufman (2006), Soytaş et al. (2007), Zhang and Cheng (2009), Halicioglu (2009), Apergis and Payne (2009, 2010), Ozturk and Acaravci (2010), Acaravci and Ozturk (2010), Pao and Tsai (2011), Ozturk and Uddin (2012).

In addition to environmental pollution, economic growth and energy, the variables such as trade openness, urbanization, population, financial development and tourism development included in the models that are used to analyze EKC hypothesis. For example, Ahmed et al. (2015) explored the relationship between deforestation, economic growth, energy consumption, trade openness and population by applying ARDL bound test for Pakistan for 1980-2013 periods. The results supported EKC hypothesis. Al-mulali et al. (2015) used panel data method to investigate the relationship between ecological footprint, economic growth, energy consumption, trade openness and urbanization in 93 countries for 1980-2008 periods. The result of the study showed that the EKC hypothesis is valid for high income and upper middle income countries.

Some researchers utilized various tourism variables to determine EKC hypothesis. For example, Katircioglu (2014a) investigated the tourism-induced EKC hypothesis using carbon dioxide emissions, economic growth, energy consumption and tourism variables for Singapore for 1975-2010 periods. The tourism-induced EKC hypothesis is confirmed in the case of Singapore. Katircioglu et al. (2014) tested the relationship between run equilibrium relationship among international tourism, energy consumption, and carbon dioxide emissions for Cyprus for 1970-2009 periods. The results revealed that there is long run relationship between the variables. Katircioglu (2014b) analyzed the relationship between tourism, economic growth, energy consumption, and environmental degradation as proxied by carbon dioxide emissions for Turkey spanning from 1960 to 2010. The results showed that there is a long run relationship the variables. Zaman et al. (2016) looked at the relationship between economic growth, carbon dioxide emissions, tourism development, energy demand, domestic investment and health expenditures with an aim to test the validity of the EKC hypothesis for East Asia & Pacific, European Union and High income OECD and Non-OECD countries for 2005-2013 periods. The results validate the hypothesis. de Vita et al. (2015) explored the relationship among tourist arrivals, economic growth, carbon dioxide emissions and energy consumption for Turkey for 1960-2009 periods. The results provide empirical support to EKC hypothesis. Ozturk et al. (2016) utilized generalized method of moments (GMM) to examine the EKC hypothesis using ecological footprint, GDP from tourism, trade openness, urbanization and energy consumption. The panel results revealed that EKC hypothesis was only present in the upper middle-income and high-income countries.

### 3. DATA, MODEL, METHODOLOGY AND EMPIRICAL FINDINGS

#### Data and Model

The data utilized in this study are annual figures spanning from 1995 to 2011 for BRICTS countries (Brazil, Russian Federation, India, China, Turkey and South Africa). Following EKC models, CO<sub>2</sub> defined as a function of energy consumption, real GDP, the squares of real GDP, energy consumption, the number of international tourist arrivals and trade openness. the variables of the study are carbon dioxide emissions (CO<sub>2</sub>) measured in metric tons per capita, energy use (E) (kt of oil equivalent), the GDP per capita (Y) is measured in millions of constant 2005 US dollars, squared the GDP per capita (Y<sup>2</sup>) is measured in millions of constant 2005 US dollars, total number of international tourists arriving and staying in tourism establishments in BRICTS countries (T) and trade openness rate (TR) proxied by the ratio of exports plus imports to GDP. Data were gathered from the WDI (2015). The panel version of model can be shown as follows:

$$\ln CO_{2it} = \beta_{0i} + \beta_{1i} \ln Y_t + \beta_{2i} \ln Y^2_t + \beta_{3i} \ln E_t + \beta_{4i} \ln T_t + \beta_{5i} \ln TR_t + \varepsilon_{it} \quad (1)$$

where  $\ln CO_2$ ,  $\ln Y$ ,  $\ln Y^2$ ,  $\ln E$ ,  $\ln T$  and  $\ln TR$  show the natural log of carbon emissions, real GDP, the square of real GDP, energy use, the number of international tourist arrivals and trade openness respectively.

#### Method and Empirical Findings

In this study, it is utilized the unit root tests and cointegration tests to investigate the relationship between carbon dioxide emissions, energy consumption, economic growth, tourist arrivals and trade openness for BRICTS countries in the context of EKC hypothesis. The empirical analysis consists of three steps. First, the stationary properties of the series were tested by unit root tests. Then cointegration test was used to test for a long-term relationship. Finally, the long-term elasticity of the variables is calculated by using panel cointegration estimator.

Integrated level and stationary properties of the series must be tested with panel unit root test to investigate cointegration relationship between the variables. Therefore, we used two panel unit root test such as LLC unit root test developed by Levin et al. (2002) and IPS unit root test developed by Im et al. (2003). The null hypothesis of both test indicate unit root process. The results of LLC and IPS unit root tests are shown in Table 1. At a first glance, the null of unit root can't be rejected clearly at 1% percent level. When the difference operator is used, the null of unit root can rejected strongly and all variables become stationary. The variables are integrated of order one therefore it seems there is possible long-run relationship between variables.

*Table1: The results of panel unit root test*

Variable	LLC		IPS	
	Constant	Constant&Trend	Constant	Constant&Trend
lnCO <sub>2</sub>	1.1512 [0.8752]	-2.1282 [0.0167]	2.3069 [0.9895]	-0.5502 [0.2911]
lnY	-0.2845 [0.3380]	0.1918 [0.5761]	5.3601 [0.9999]	0.5105 [0.6952]
lnY <sup>2</sup>	3.0936 [0.9990]	-1.4423 [0.0746]	5.6301 [0.9999]	1.0261 [0.8476]
lnE	2.9941 [0.9986]	-1.8759 [0.0303]	4.5114 [0.9999]	-0.2732 [0.3923]
lnT	-2.0432 [0.0205]	-5.7857 [0.0000]	-0.7974 [0.2126]	-3.7919 [0.0001]
lnTR	-10076 [0.1568]	-2.3769 [0.0087]	-0.5464 [0.2924]	-2.7321 [0.0031]
ΔlnCO <sub>2</sub>	-7.2190 [0.0000]	-5.6647 [0.0000]	-5.7854 [0.0000]	-3.2717 [0.0005]
ΔlnY	-10.4721 [0.0000]	-10.3147 [0.0000]	-3.6208 [0.0001]	-3.2880 [0.0005]
ΔlnY <sup>2</sup>	-4.4594 [0.0000]	-5.1990 [0.0000]	-3.4340 [0.0003]	-3.3296 [0.0004]
ΔlnE	-6.9367 [0.0000]	-7.1060 [0.0000]	-5.4419 [0.0000]	-4.7358 [0.0000]
ΔlnT	-7.0016 [0.0000]	-8.3664 [0.0000]	-5.3765 [0.0000]	-5.2173 [0.0000]
ΔlnTR	-5.4220 [0.0000]	-4.0993 [0.0000]	-6.0530 [0.0000]	-4.9475 [0.0000]

Δ is the first difference operator. The maximum lag lengths were selected automatically using with Schwarz Information Criteria. Numbers in brackets are *p*-values. Newey-West bandwidth selection with Bartlett kernel is used for LLC test. Numbers in brackets are *p*-values.

In order to examine the long-run relationship between variables, the panel cointegration test developed by Pedroni (1999) is utilized. Pedroni (1999) developed seven statistics to analyze the possible long-run relation and the test which is based on estimation of Eq 1. with estimation of  $\delta_i \varepsilon_{it-1} + \sum_{k=1}^{K_i} \delta_{ik} \Delta \varepsilon_{it-k} + v_{it}$  regression model. The null hypothesis of test indicates that there is no cointegration between variables.

The panel cointegration test results are presented in Table 2. The results show that the null of no cointegration can be rejected for the model. Therefore, it can be said that the carbon dioxide emissions (CO<sub>2</sub>), economic growth, the squares of economic growth, energy consumption, tourism volume and trade openness are cointegrated.

Table2: Results for panel cointegration tests.

Test	Constant	Constant and trend
Panel $\nu$ -statistic	-0.89	-1.42
Panel $\rho$ -statistic	1.07	1.51
Panel PP-statistic	-5.70***	-9.40***
Panel ADF-statistic	-7.69***	-8.65***
Group $\rho$ -statistic	2.21	2.63
Group PP-statistic (non-parametric)	-6.70***	-14.23***
Group ADF-statistic (non-parametric)	-6.40***	-9.48***

\*,\*\* and \*\*\* indicates statistically significance at 10, 5 and 1 percent level respectively

The next step is to examine the long-run coefficients of cointegrated variables. The long-run coefficients of variables are estimated with fully modified ordinary least squares (FMOLS) developed by Pedroni (2000). The estimation of FMOLS can be constructed as  $\hat{\beta}_{GFMOLS} = N^{-1} \sum_{i=1}^N \beta_{FMOLS}$  where  $\beta_{FMOLS}$  is acquired from individual FMOLS estimation of Eq 1.

The results of panel group FMOLS estimation are reported in Table 3. The panel group FMOLS estimation results show that the increase in energy consumption by 1% will increase CO<sub>2</sub> emissions by 0.96%. The increase in economic growth by 1% will increase carbon dioxide emissions by 0.87%. The results also showed that the increase in tourism volume by 1% will increase CO<sub>2</sub> emissions by 0.10%. In addition, 1% change in trade openness will change carbon dioxide emissions by 0.07% in the opposite direction.

Table 3: The results of panel group FMOLS estimation

Variables	Coefficients	t-istatistic
lnE	0.96***	12.16
lnGDP	0.87***	19.02
lnGDP <sup>2</sup>	-0.02	-0.54
lnT	0.10*	1.73
lnTR	-0.07**	-2.41

\*,\*\* and \*\*\* indicates statistically significance at 10, 5 and 1 percent level respectively.

#### 4. CONCLUSION

This study aims to investigate the relationship between per capita CO<sub>2</sub> emissions, real per capita GDP, per capita energy consumption, trade openness rate and the number of international tourists who visit BRICTS (Brazil, Russian Federation, India, China, Turkey and South Africa) countries over the period from 1995 to 2011. We applied panel unit root tests, the panel cointegration test and the panel FMOLS method in order to examine the nexus.

The results of the panel cointegration test reveal that per capita CO<sub>2</sub> emissions, real per capita GDP, per capita energy consumption, trade openness rate and the number of international tourists are cointegrated. In addition, the panel FMOLS estimation results demonstrate that an increase in energy consumption by 1% will increase CO<sub>2</sub> emissions by 0.96%. Furthermore, the increase in economic growth by 1% will increase carbon dioxide emissions by 0.87%. The results also showed that the increase in tourism volume by 1% will increase CO<sub>2</sub> emissions by 0.10%. In addition, 1% change in trade openness will change carbon dioxide emissions by 0.07% in the opposite direction. The results also indicate that squared real GDP is not statistically significant in these countries. The results of the present study show that tourism activities lead to environmental degradation, but inverted-U EKC hypothesis is not valid in BRICTS countries.

These empirical findings suggest some policy implications. Policy makers should take appropriate steps aim to sustainable development. It is important to conduct projects that help to increase energy efficiency and energy saving and also increase the role of renewable energy

from total energy use. In addition, it is essential a balanced and environmentally friendly plans and projects in tourism sector. It should be encouraged to use clean energy resources. Moreover, it is important to conduct programs for tourists to increase their environmental awareness.

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## COMMERCIAL BANKING AND PERSONAL INDEBTEDNESS IN CROATIA

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### ABSTRACT

*Social phenomenon of personal over-indebtedness has emerged in the past thirty years. The trend of excessive indebtedness of households is not losing but gaining momentum. The problem of personal over-indebtedness becomes focus of interest of regulators, research community and the public in general. In Croatia the numbers of citizens whose bank accounts are frozen as well as the level of their debt are steadily rising. One of the reasons of such trend is easier access to debt. There is evidence that accessibility and volume of household credit instruments grows. The literature suggests the influence of new, technologically powered techniques of screening as one source of broadening of the borrowing capacity of households. Studies also document the process of „credit democratization“, one of the reasons enabling it being the relaxation of financial regulation. Only few studies can be found that research the role of bank operations policies in inducing the higher levels of household debt. Bank marketing, specifically the advertising and promotion are the tools to communicate with clients, and it has been proven that effective marketing content is as powerful as the interest rate level in deciding upon getting a credit. This leads the way to the research of possible relation between marketing efforts of the bank and the level of household indebtedness. This paper focuses on the possible proactive role of banks, driven by the profitability, and accompanied with the inappropriate quality and level of regulation, in the rise of the number of over-indebted persons in Croatia. The effect the economic downturn on proposed relationship is also taken into account. Analysis is based on the bank financial statements data and selected macroeconomic indicators. The goal of the paper is to describe how banks impact the consumer behavior, and consequently give incentive to the rise of personal indebtedness in Croatia.*

**Keywords:** *Commercial Banking, Consumer Behavior, Croatia, Personal Over-indebtedness*

### 1. INTRODUCTION

Banks as financial institutions that ensure capital resources to businesses and households are continuously involved not only in business but also in everyday life of a society. Households represent for banks currently the most interesting target group that is ready to spend part of their income on acquisition of bank services.

With the use of the synergy of its different business functions the primary goal of the bank, like any other business is to maximize profits. Today, in modern and changeable business environment, that goal is somewhat disguised with the purpose of putting upfront banks' role in boosting economic growth and prosperity in an economy. Thus, consumers, influenced by their preferences on one side, and by different factors from the environment, are often being encouraged through various bank activities, including marketing activities, to regards bank

services as means to their economic advancement, with no reflection on banks profit motivation. Household trends in bank business in terms of deposits, loans and purchasing power in Croatia did not significantly change until 2008, when the global economy was affected by the financial crisis. The fact is, until then the purchasing power was steadily growing. Not taking into account the macro-economic aspect and further government borrowing, the household sector has maintained the upward trend of consumption from year to year, and that resulted in the growth of the total debt in the banking system. Individuals, families or society as whole, have maintained adequate lifestyle covered not only by current income, but also by getting in debt in order to improve the socioeconomic status. Research (Ramsay, 2012) labeled over-indebtedness as a significant social and economic issue. Person or household is considered to be over-indebted if it falls behind with payments on the structural basis or is in an immediate greater danger to be found in such a state. Such issue disproportionately affects lower income groups (especially where there is no significant modification of financial resources/income) during the time of neoliberalism and deregulation. Ideology of neo-liberalism is associated with privatization, regulation downsizing and reduction of government costs.

The whole financial system of institutions, among which the banks are the most prominent ones, is interconnected and involved in creation of the credit market supply. Contemporary business environment in which banks operate is characterized by the increase of the level of competitiveness, deregulation of markets, the increase of the transparency of operation and despecialization of the business. Following deregulation, not only overall lending increased, but also bankruptcy rates rose (Dick and Lehnert, 2010). Besides, banking deregulation, the relaxation of bank entry restrictions in the 1980s and 1990s with technological change in consumer lending, increased credit market competition and therefore affected on the supply of credits. New technologies change the way loans are made, allowing for interest rates to better reflect underlying risk and, thus, facilitating lending to riskier borrowers. Furthermore, Dick and Lehnert (2010) indicate that increased competition prompted banks to adopt sophisticated credit rating technology, allowing for new credit extension to existing and previously excluded households. Another research results (Black and Strahan, 2002) support the thesis that deregulation increases the rate of business incorporations, thus suggesting an increase in credit availability for the sector. Both lead to the increase in credit and economic growth.

Banks continue to adapt their business to the changing and specific circumstances on the market, as well as to the legislative, financial and economic pressures from the environment. Besides, banks try to develop suitable strategies in a timely manner and manage change in order to achieve sustainable growth and profitability, regardless of the outcomes on the level of their clients, notably the households. However, in the banking sector the responsibility of regulator, when it comes to the growing trend of personal over-indebtedness management encouraged by irresponsible credit granting, needs to be highlighted. Van Heerden and Renke (2015) point out that in the context of the prevention of over-indebtedness, responsible lending practices by credit providers play a pivotal role in avoiding consumers getting caught in debt trap, which leaves them locked into a vicious cycle of over-indebtedness. It is thus of importance for a country and government to ensure that the financial welfare of its consumers maintains on the healthy credit market with an effective responsible lending regime. That way irresponsible credit granting may be avoided and debt relief to over-indebted consumers can be provided.

In this paper the causes, effects and implications of growth of personal indebtedness and household credit availability are examined. The case of Croatia is presented through display of trends in lending in the last decade, including the years of global financial crisis. Special attention is given to the analysis of possible active role bank marketing could have in



contributing to the ever rising trend of personal over-indebtedness. Finally, conclusions are given with proposal for the future research of the impact banks have on the issue of excessive personal debt.

## **2. HOUSEHOLD CREDIT AVAILABILITY AND GROWTH OF PERSONAL DEBT**

The last two decades of the 20th century witnessed a dramatic increase in personal bankruptcy filings which continued into new millennium. In particular, in the USA, the personal bankruptcy rate has increased more than three fold in the last two decades of the last millennium. Livshits (2015, pp. 596, 597) argues that households can quite effectively smooth transitory income shock over time, as long as they are able to borrow (sufficient amounts and at good interest rate). The aspiration for higher living standard or at least the maintenance of the already reached standard pushes households to make unsound borrowing decisions. They are driven by favorable loan conditions and result in higher levels of indebtedness. Furthermore, such activities contribute to the development and growth of banking industry. For example, the borrowing of middle class had increased despite non increased income on the USA market (Attali, 2009). In his research Ramsay (2012) compares two markets: English and French. By 2010 the majority of debtors in France had net revenues less than the minimum wage. Also, rapid growth of personal bankruptcy files received (for providing a solution to individual's financial situation) is noted. According to situation in England, the number of consumer credit had doubled since 1980s which caused credit expansion. The majority of English bankruptcies were related to consumer debt rather than the business reasons. Consumer bankruptcies represent in 2010s over 80 per cent of bankruptcies compared with 39 per cent during the height of the early (Ramsay, 2012, p. 237). The increased numbers of consumer insolvencies may also lead to the question if neoliberal ideas and commitment to a 'competitive social market economy', for which European Union advocates, contribute to the growth of over-indebtedness (European Commission, 2008). Ramsay (2012, p. 247) concludes that the law of over-indebtedness may symbolize the breakdown of social and family sources of solidarity and the rise in inequality associated with neoliberalism.

The presence of uncertainty on the market led to insolvency, lowered the value of real estate and had other negative effects on the overall economy. Changes on the market caused financial crisis, which initially started in the United States. The business of European and other global banks on the US market were affected by the same consequences which enabled spreading crisis not only to Europe but also globally.

However the rise in consumer bankruptcies is not primarily driven by the increase in uncertainty, but rather by changes in the consumer credit market. The information-related mechanisms which include improvements in information technology (IT) (improved availability, accuracy and timeliness of information, lower lending and credit processing costs, lower costs of identifying and targeting pools of borrowers based on their (risk) characteristics and related combinations) lead to the rise in bankruptcy rates. Causes are twofold: intensive margin of existing borrowers and extensive margin of new borrowers gaining access to credit. The latter phenomenon is labeled "democratization of credit" (Livshits, 2015, p. 599) and it came from lenders. It may be also connected with information content marketing and rising marketing activities of the banks to promote and encourage borrowers to use their services.

After the occurrence of uncertainty on the market, the overall debt had risen as well as personal debt per capita. This trend has particularly been influenced by demographic trends of ever larger proportion of older people who try to maintain the achieved living standard through debt, and by changing sets of values that favor consumerism and that induce higher levels of consumption

across all age groups. Banks encourage such behaviors by selective information practices towards their clients, which in turn have a notable impact on the growing problem of household indebtedness.

### **2.1. Consumer behavior and commercial banking**

Through the past little attention has been paid to social and psychological aspects of debt. People attribute their debt problems to their pleasure in consumption (greed and enjoyment in shopping). Kahneman and Tversky (2000) explained the new progress of cognitive psychology according to which people in similar circumstances, would rather choose the perceived gain than the perceived loss. However, the rise of personal debt is causing problems for banks and other lending institutions as well as for private individuals (Leigh-Pemberton, 1989).

The banks are defining marketing strategies which will not only attract potential, but also retain existing customers. The digitalization of financial services and the way in which banks adapt their services to the clients' needs (with the help of aggressive advertising and promotion) contribute to the creation of profit and attraction of new bank clients (Westerman et al., 2012). Successful promotional activities of a bank and availability of credit cards can impact on encouragement of the consumers to often use credit cards, to increase the demand for bank services and consequently increase personal indebtedness (Turan et al., 2013). Additionally, the bank marketing may increase the profitability of the bank, thus, with the proper decisions of the bank management and with necessary promotional activities, negative effects from the environment, such as financial crisis, can be bypassed (Janković, 2009).

The next issue that relates to the uneven exposure of consumers to financial information has to do with extraordinary gap between the levels of investment into financial education versus financial industry marketing. In the United States (CFPB, 2013) about 25 times more is spent on financial industry marketing efforts than on financial education. Approximately 670 million dollars are spent annually on providing financial education by government and others. At the same time, the financial services industry spends approximately 17 billion dollars annually on marketing consumer financial products and services. Besides, Cameron and Golby (1990) noted that if social comparison processes drive people they consume even more. Those in more debt are people who take financial risks based on often unreasonable expectations of the payoff. Also, there is negative correlation between self-control and income. These findings add to the argument that individuals are overwhelmed by bank selected information and that government should play a more proactive role in prevention of over-indebtedness.

Based on the well-known life cycle hypothesis of saving (Modigliani and Brumberg, 1954) consumers attempt to maintain their lifestyle even though their income and wealth may fluctuate over time. Specifically, older consumers can borrow from their past savings and consume at levels beyond their current incomes. Conversely, young consumers who expect future incomes to be higher than their present income can borrow from their future income to support their present lifestyle. This phenomenon is called intertemporal smoothing. Prior behavioral research confirmed that consumers are unable to correctly value their present and future resources, and they lack the cognitive capability to solve the intertemporal optimization problem required by the life cycle hypothesis. Furthermore, it is argued that consumers use external information such as the availability of credit to infer their future earnings. Consequently, there are negative social, psychological as well as economic implications of such consumer behavior.

## **2.2. Credit limit as a factor of indebtedness**

Credit limit perceived as measure of credibility has a moderating role on the level of indebtedness. Specifically, if consumers have easy access to large amounts of credit, and they believe that the credit limit credibly represents their future earnings potential (typical belief of a naive consumer who has limited experience with consumer credit) they are likely to infer that their lifetime income is high and hence their willingness to use credit will also be high. Besides, as a routine practice, in banking industry credit limit is freely used as a tactical marketing tool. Credit limits on most accounts have been steadily ratcheted up (Lunt, 1992), and when credit card users with good payment records reach their limit, their credit line is typically increased (Punch, 1992). As a result, the presumed rationality of the credit-limit-setting process is called into question. The weight is put on consumer and it is also up to the person how he or she will behave. Finally, when card limits for households are increased, this causes a significant rise in debt (Gross and Souleles, 2002).

The increase of credit cards availability over time had an impact on the growth of consumer borrowing and over-indebtedness. Research confirms positive relationship between consumer credit and consumption (Ludvigson, 1999). Such positive relationship had been provided by the liberalization policies on the credit market (Bilgin and Yavas, 1995). Eventually, the increased promotion of credit cards induced greater availability of credit which had considerable impact on growth of the personal indebtedness.

Banking industry deregulation and increased competition in credit markets had an adverse effect on consumer default (Dick and Lehnert, 2010). That was reflected in a consumer bankruptcy rate increase. This has occurred via two channels: increase in credit and the use of new screening technologies introduced after deregulation which allowed credit to be extended to the new consumers. Although the risk of any given borrower defaulting did not necessarily rise, the presence of many extra borrowers in the population perforce increased the bankruptcy rate. Named happenings led to a type of democratization of credits where they became easily accessible to a large amount of people with both low income and questionable future revenues. According to Leigh-Pemberton (1989), personal debt has risen sharply in the United Kingdom because of the removal of restrictions on consumer borrowing, a greater range of credit sources, and increased amounts loaned in proportion to disposable income or securities.

Walker (2012) and Harper (2003) have articulated that recent practices suggest that personal debt has arisen largely as a result of structural changes in employment, credit and housing markets. It is necessary to understand ideology and the complex social systems so that management, government and its financial framework can 'cure' the problem of cognitive financial delinquency. However, the consumption, as a social dimension, integrates people within the general system of capitalist exploitation and encourages them to realize their "false" identities, aspirations and interests through a process of ownership of goods (Burić, 2010). Also, the consumer culture and attractive offers on the market give consumers the illusion of freedom, choice and satisfaction for, in long term, replacement with the actual loss of these qualities.

## **3. PERSONAL INDEBTEDNESS TRENDS IN CROATIA AND FINANCIAL CRISIS**

Even though the demand for household loans has been slightly decreasing on the Croatian financial market since 2009, the proportion of bad loans has increased. At the same time government debt has been increasing, and GDP fell precipitously in 2009 (-8,9%), interest rates increased, the share of non-performing loans of the households increased by 25% and industrial production fell by 16% (Croatian National Bank, 2009; Bokan et al., 2010). The changing

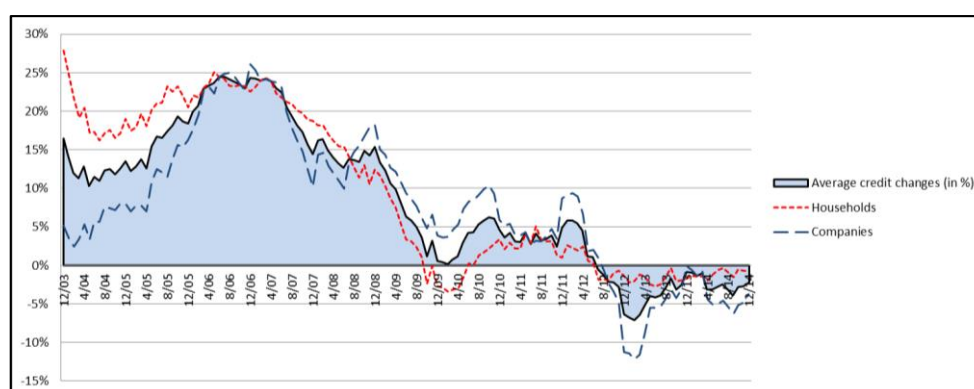
structure of the loan allocation by banks in Croatia in the last twenty years can be discerned from the data presented in Table 1.

*Table 1: Structure of loan allocation of Croatian banks (Authors' calculations according to the data from Družić, 2001 and Croatian National Bank, 2007, 2009 and 2015)*

Year	Corporate loans	Household loans	Other loans
<b>1994</b>	69,9%	28,8%	1,3%
<b>2006</b>	40,0%	39,4%	20,6%
<b>2008</b>	38,1%	49,8%	12,1%
<b>2014</b>	34,2%	45,4%	20,4%

From the changing proportions of the loan allocation that favor households and government (major part of the column "other loans") on account of corporate sector it can be concluded that banks have oriented their business toward household sector. Such shift ensures growth and development of banking business with the changing value sets that favor consumerism, also causing a significant increase of personal debt.

The impact of financial and economic crisis on the credit market can be seen from Chart 1 which presents the annual change of growth of retail lending (household and corporate).



*Chart 1: Loans of credit institutions in Croatia, 2003-2014, the annual change of growth (Authors' calculations based on the data from Croatian National Bank, 2015)*

The impact of crisis is obvious and the credit market has still not recovered. The corporate lending is more sensitive to business cycles than the households, which provides another reason for banks to prefer doing business with households.

In the same period the trend of bad loans growth can be detected. The data on the dynamics of bad, non-performing loans in the period from 2010-2014 is presented in Chart 2.

*Chart following on the next page*

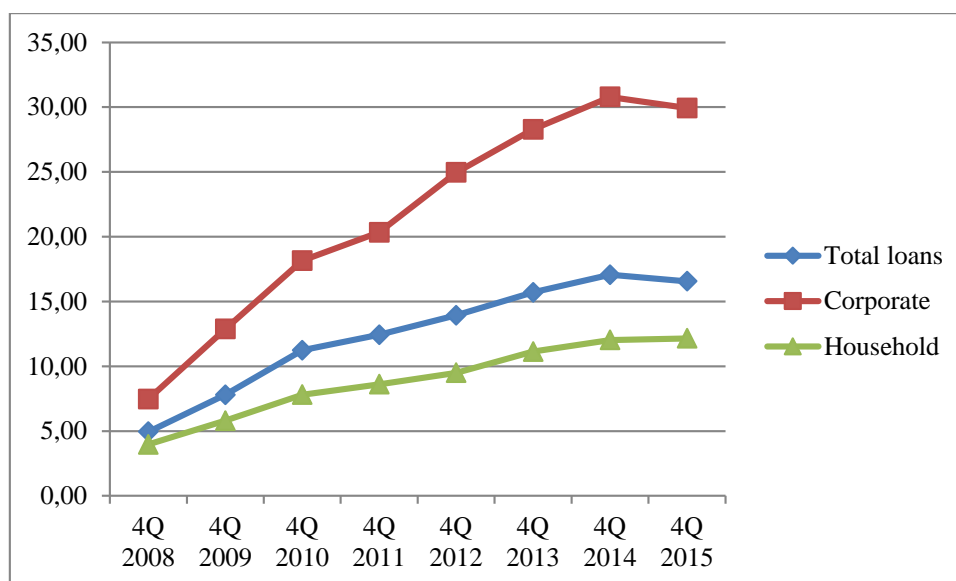


Chart 2: Share of non-performing loans, 2010-2015  
(Authors' calculations based on the data from Croatian National Bank, 2016)

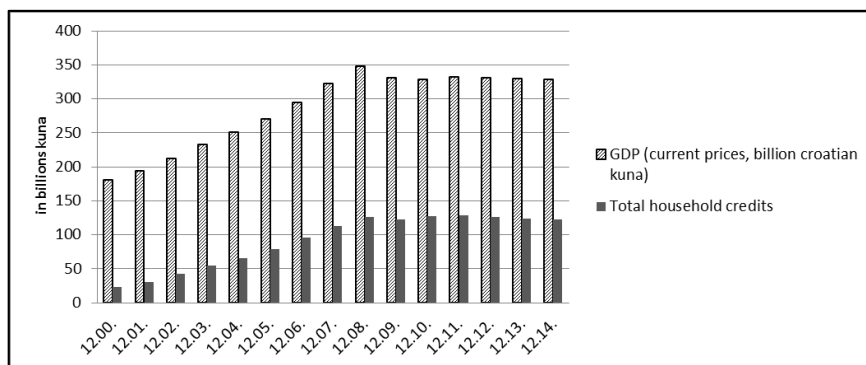
Even though the economic and financial crisis had an impact on the decrease of total debt, there had been a considerable increase in the share of bad loans. In the period from 2009 to 2012 the corporate bad loans increased by about 18 percentage points and in 2014 they reached a level of over 30%. In 2015 total and corporate bad loans decreased, whereas household bad loans still demonstrate growing trend, reaching their peak in 2015 at the level of 12,15%. Households have been faced with the increase in interest rates, raising costs of living, high levels of unemployment, all deteriorating their ability to repay loans, and resulting in ever growing over-indebtedness. Total household loans amounted 120 billion kunas at the end 2015, and bad loans count for 14,6 billion (Croatian National Bank, 2016). The level of non-performing loans means that almost every 8th household loan might default.

Another trend is aligned with the above stated that of a sizable increase in property foreclosures. Data shows that there were 319 foreclosed properties in Croatia in 2006, 6773 in 2013, and more than 1600 in the first two months of 2015. In the last five years 126.378 property foreclosures were initiated (Zagrebačka banka, 2016, p. 15). This is also a consequence of a long period of economic crisis, and the fall of the standard of Croatian citizens coupled with over-indebtedness.

Further evidence of the above is the data on the frozen accounts of individuals in Croatia. At the beginning of 2015 over 313 thousands persons had a frozen transactions account, with total debt of over 31 billion kunas. 64% of their debt is to the financial sector (Financial Agency, 2015). By the end of 2015 number of frozen account rose to over 321 thousand, and their debt rose to over 36,5 billion kunas (an increase of over 17% in just one year). The total debt increased by 206% in the period from 2012-2015 (Financial Agency, 2016). Most of the individuals with frozen accounts have been in that situation continuously for longer than a year.

The financial crisis and the growing trend of bad loans caused the decrease of all household loans except for non-purpose loans which steadily rose from 36,4 billion kunas in 2012 to 39,8 billion by the end of 2015 (Croatian National Bank, 2016). This presents another argument in line with the growing problem of personal indebtedness. Namely, the non-purpose loans usually are used as means to pay short term obligations, such as current living expenses or to reprogram the old debt.

The line of reasoning that the financial crisis and household borrowing patterns are very much related is clearly seen from the following data. The level of GDP and total household loans are presented in Chart 3.



*Chart 3: Croatian GDP and total household credits 2000-2014*  
(Authors' calculations based on the data from Croatian Bureau of Statistics, 2014 and Croatian National Bank, 2015)

The relationship between the level of household loans from Croatian banks and the level of GDP is strong. The correlation analysis shows that total household loans are highly positively correlated with GDP, with Pearson correlation coefficient of 0.96 ( $p < 0.01$ ) (Authors' calculations based on the data from Croatian Bureau of Statistics, 2014 and Croatian National Bank, 2015). Finally, the increase in the credit supply should lower the cost of capital and boost economic growth. Accordingly, a credit growth should represent an increase of supply of the capital and the growth of gross domestic product of the economy. At the same time, this leads to an increase in household spending and additional borrowing.

Similar trends have been documented in literature, which proves that the described trends in Croatia fit into the wider spread trends of rising personal indebtedness. Luckett's (2002) research reveals more uncertainty leads to an increase in precautionary savings, or conversely, a decrease in debt. Lamdin's (2008) analysis of the US market shows that total consumer debt as a percentage of GDP has risen from 1960s to 2005. As early as in the 50's Galbraith and in the 70's Simon had highlighted the responsibility of advertising and other sales promotion for the rising consumption rate and falling savings rate. In Galbraith's (1958; referenced by Lamdin, 2008, p. 597) words said: "Viewing this process as a whole, we should expect that every increase in consumption will bring a further increase – possibly a more than proportional one – in consumer debt. Our march to higher living standards will be paced, as a matter of necessity, by an even deeper plunge into debt".

In conclusion, the increase of lending to the households, but also to the corporate sector and the government, affects the increased indebtedness of the whole society. According to the demonstrated relationship between household lending and the Croatian GDP one can say that the improvement in the economic situation of the country and eased credit conditions lead to the increase in personal indebtedness.

#### **4. BANK MARKETING AS CONSUMPTION STIMULATOR**

Marketing involves tools and activities that have been considered more as art than science. But contemporary needs of business call on marketing discipline to be accountable and to link its contributions to financial performance so it can determine the level of new value it has given to

the company (Stewart, 2009, p. 636). The implications of marketing activities have been confirmed in many scientific and professional studies. The CMO Council (2004), states that marketing has an impact on accelerating drive for greater effectiveness and continuous improvement of the business. It can reduce business costs and increase returns, increase the value to the firm and to the consumer and that makes it a cornerstone for continuous improvement. Stewart (2009) pointed out that its activities may provide a reasonable estimate of the profitability of the business. More specifically, in banking industry increased spending on marketing activities (advertising and promotion) causes the profits and market share to increase significantly (Mullineaux and Pyles, 2010).

Theoretical concepts of psychology of consumption, marketing and consumer behavior are used in explanation of the emergence of the phenomenon of consumer society and the rise of consumerism in the postwar period in the developed, western world (Burić, 2010). Consequently, the growth of personal debt has to be examined from the point of view that takes into consideration the impact of marketing powered by new technology. In banking (as in other businesses) this has facilitating effect on screening of consumer needs, wishes and possibilities, it add to the speed of decision-making process and cuts cost with increased efficiency of marketing investments. Technological improvements in banking that were stimulated by deregulation and rising market competition, had brought not only more efficient business to the banks but also a chance to exploit economies of scale in consumer lending, both in terms of their geographic scope and operations scale (Dick and Lehnert, 2010). It improved possibilities of credit allocation and made it possible to establish closer communication with costumers, for example through mobile messaging systems, social network notifications, personalized e-mails and conventional letters. But on the other hand, the effect of these developments on personal indebtedness is evident and significant. Data presented by Dick and Lehnert (2010) supports the theory that the expansion of the availability of credit, following deregulation, may lead to the expansion of the supply of consumer credit and rising personal bankruptcy rates.

The example of credit limit approval as a type of marketing tool proves its power on boosting consumer consumption and over-indebtedness. Consumers use the size of the credit limit available to them as a signal of their future earnings potential, and hence the available credit limit positively impacts the propensity to spend (Cheema and Soman, 2002). Personalized advertising (enabled by sophisticated software solutions in banking) makes it more likely that a person would choose particular personalized special offer for further indebtedness dedicated just to him or her. The practice of telling consumers that they “deserve” increases in their credit limits are not only non-informative but might also mislead consumers into believing that their projected future net worth has actually increased. Marketing content can be shown as a powerful tool of future financial engagements of consumers and therefore of special interest for banks trying to add more value to their services and increase profits. By development and improvement of consumer experience and different advertisements and promotion techniques follow the innovative way of thinking and show the ideas in the content. A scientific direct mail marketing field experiment conducted in South Africa (Bertrand et al., 2010) tried to determine how much or how various marketing content techniques affect demand for credit. The results showed that specific marketing content oriented to consumers, in this case a photo of an attractive woman, increases consumer loan demand by about as much as a 25% reduction in the interest rate. Therefore, it has been proven that effective marketing content is as powerful as the interest rate level in deciding upon getting a credit. These results show that banking advertising and promotion costs are successful tools of boosting consumption and consequently an active agent of the worsening problem of private over-indebtedness worldwide.

## 5. CONCLUSION

Contemporary business environment in Croatia is affected by dynamic changes in global business trends. The banks are led by the objective to achieve sustainable profitability and increase the market share. Trying to do that banks adapt to business changes in the environment that are focused on service innovation, strengthening of competitiveness and responding to new challenges on the market. Such development of bank services and innovations on the market has also contributed to the growth of the indebtedness of households.

The presence of economic and financial crisis in Croatia has encouraged innovation and diversification of the methods used to approach the consumers, clients of the banks. Consequently, the aim of the bank's business in the 21st century is creation of personalized offers to customers in order to preserve long term bank-client relationship, and induce loyalty.

The latest data shows no relaxation of the trend of rising consumerism. On the contrary, if an economy is in the phase of recovery, this encourages and motivates customers to borrow additional funds or use additional bank services. There is further evidence (Drozd and Serrano-Padial, 2014, p. 21) for the existence of democratization of credit that was spurred by the revolving credit card revolution and resulted in the extension of credit to new (and seemingly riskier, but also the most profitable) borrowers in the recent decades. This phenomenon takes on quite naturally, both in response to various improvements in information technologies and even in response to lower costs of advancing loans. The mechanism is quite intuitive: as lending technology improves, it makes lending to riskier types (associated with greater expected deadweight losses of default) profitable. This means that new loans are relatively more risky ones. New instruments, tools and opportunities that are offered to the consumers, such as contactless payment, revolving services, digitalized wallets or payment via mobile phone, allow consumers easier, simpler and faster (seemingly at lower costs) borrowing, regardless of socioeconomic status.

The future brings new questions and challenges to both: banking industry and regulator. The emphasis will certainly be on control of consumption and indebtedness. Even though the lender should utilize all available information to determine the future potential earnings of the consumer, the client should also do his part in the process: read carefully the information given by the bank, as well as participate in an interview with a consumer loan officer. However, there exist no formal guidelines for banks (set by regulator) to apply in setting credit limits. The growing problem of personal debt needs also to be considered beyond the discourse of poor money management (Harper, 2003). It is only through understanding ideology and the complex social systems that produce people in poverty that we can begin to replace an individualized approach with an understanding of poverty as a collective trauma and responsibility. Growth of personal debt, especially due to the influence of escalating credit limits highlighted the need to address consumer education and credit card regulation issues. Competent institutional framework would set rules and regulations that would enable the banks and the government to improve the household quality of life through sustainable levels of indebtedness. This should be done by efficient control of the operations of all financial institutions that have an impact of the household indebtedness, especially the most important ones: the banks. The social acceptability of enormous marketing budgets of banks should be reviewed and adequately regulated (downsized and/or abandoned).

The rising bankruptcy and over-indebtedness trends seem to have been broken only by the reforms of the personal bankruptcy system (Livshits, 2015). This research also highlights the necessity of policy measures to control the seemingly indiscriminate increases in credit limits.



By paying attention to existing alternatives for over-indebted consumers, such as discharge of debts and (partially) repayment, it is necessary that the regulator ensures stable, fair, efficient and transparent financial system (with transparent data) to protect the creditor, saver and investor who are doing business with the particular bank.

The regulator is also responsible for developing and implementing initiatives intended to educate and empower consumers to make better informed financial decisions. The financial literacy should be improved so that people can act more rationally. This extends to the behavior and rationality of the employees of the bank since no rational lender would advance a loan that will certainly not be repaid. Households should be aware of the effects that economic downturns have on the indebtedness and respond by accumulating precautionary savings, and reducing their debts (Livshits, 2015).

Responsible lending practices cover a wide array of measures that can prevent issuing and getting a credit with high chances of default and with great impact on elevation of personal indebtedness. They include consumer education, promotion of financial literacy, responsible marketing, the cost of credit regulation, pre-agreement screening or assessment of consumers (Renke, 2012). The focus so far has been much more on irresponsible borrowing, and it should also shift to irresponsible lending (Wilson, 2004). It is necessary to benchmark efficiency of lending regimes and make them proactive and responsible. The most important goal is protection of the consumers from the harms of reckless lending, avoiding over-indebtedness, including during the financial crises. The lending practices should not be over-restrictive and should make it possible for individuals, even with low income, to indeed repay loans. This can be done through appropriate, individualistic credit assessment process and by structured repayments and loan terms so that borrowers can repay without substantial hardship. The regulator has a duty to be a vigilant and monitor compliance by credit providers. Evidence shows (Van Heerden and Renke, 2015) that consumers are more protected and 'responsibilised' by such regime.

The treatment of over-indebtedness will certainly reflect the tensions between consumer protection and the promotion of consumer credit as a perceived engine of growth. Government should take on a proactive role in ensuring provision of responsible lending, introduce greater controls on credit, especially revolving and possibly even restrict marketing of banking services, especially household credit. It remains unclear to what extent would such measures affect levels of personal over-indebtedness.

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## FINANCIAL ASPECTS OF CYBER RISKS AND TAXONOMY FOR THE EFFICIENT HANDLING OF THESE RISKS

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### **ABSTRACT**

*Nowadays, due to the globalization of entrepreneurship and the rapid improvements in the information and communications technology, Chief Executive Officers and Chief Financial Officers face new challenges. Almost, every business that uses intranet or/and internet is facing cyber risks. Cyber attacks and data breaches are on the rise. Moreover, according to Ponemon Institute (Ponemon Institute Releases 2014 Cost of a Data Breach: Global Analysis), the average cost to a company was \$3.5 million. However, market participants mainly assume that cybersecurity is mainly an information technology issue rather than a cross-organizational risk management issue. In addition, a large number of scientific articles, approaching the issue of cyber risk from technological side. This assumption can lead to inappropriate management of cyber risk and the devaluation of its financial dimensions. The main purpose of this paper is to highlight the financial aspects of cyber risk, emphasize the key role of Chief Executive Officers and Chief Financial Officers and present a new taxonomy for the efficient handling of these risks.*

**Keywords:** *cyber risks, financial analysis, taxonomy*

### **1. INTRODUCTION**

The evolution of informatics and digital technology have brought substantial benefits to organizations and have created opportunities and growth prospects. Moreover, the use of electronic data and internet is among the daily activities for a large number of organizations. At the same time, in recent years we have seen an increasing use of digital devices (smartphones, tablets, PCs, etc.) and cloud computing services by organizations and their executives. However, the utilization of new technologies not only offers advantages to organizations but also exposes them to major cyber risks. These risks must first be understood in order to be effectively managed and limited.

Barack Obama since 2009 had proclaimed (THE WHITE HOUSE Office of the Press Secretary, 2009) that cyber risks are one of the most serious challenges for economic and national security facing the nation and that the economic prosperity of the United States in the 21st century will depend on cybersecurity. Indeed, on February 12, 2013 he signed (THE WHITE HOUSE Office of the Press Secretary, 2013) the Executive Order no. 13636, improving critical cybersecurity infrastructure.

Cyber risks are included in operational risks to which businesses are exposed. According to the Basel Committee (Basel Committee on Banking Supervision, 2001) operational risks are defined as risks arising from inadequate internal procedures or violations of these processes, human behavior, systems or external factors.

Specifically, cyber risks refer to the possible damage that may arise from unauthorized access (U.S. Department of Energy, 2012), use, disclosure, disruption, modification or destruction of data and / or information systems and communications of an organization. To better understand and manage these risks it is necessary to classify them.

## 2. THE NEW ROLE OF CEOs AND CFOs IN THE CYBER ERA

For the successful management of cyber risk, an organization can develop a cyber risk framework with a sub-framework containing the financial analysis of cyber risk. During the development of this framework the CEO should coordinate all departments. CEO may ask the CFO to investigate the potential financial loss that the organization will have in case of a cyber attack and propose ways of mitigation and overall cost of the investment on information security. For this task CFO have to recognize the sources of financial impact in case of a cyber breach. These sources may be loss of future business due to damage to firm's brand or reputation, loss of customers, loss of capital due to a drop in the stock price, loss of employee productivity/morale, suits by customers and suppliers, potential suits by shareholders, fines from regulatory bodies, recovery of lost/stolen information, hiring a forensic investigator, etc. Then it should be quantifying the expected loss of each source and estimate the probability of cyber attack. CFO may also determine the portion of risk that may be undertaken by the organization itself and the part of the risk will be hedge through a cyber insurance or outsourcing. However, there are difficulties on the above procedures mainly to quantify the expected loss. Additional, obstacle to developing an effective strategic cyber risk management is often the lack of direct communication between Chief Information Officers (CIOs) with CEOs and CFOs (PwC, 2013).

## 3. THE SIX PILLARS OF CYBER RISKS

Business executives whowill develop and implement an integrated management framework should first of all consider the characteristics of these risks and their relationship with the organization. In order to help this process we propose the use of the taxonomy shown in Figure 1.

This taxonomy is composed of six pillars that refer to actors of cyber risks, motivations, targets, methods, assets at risk and their repercussions. The analysis of these pillars is described below.

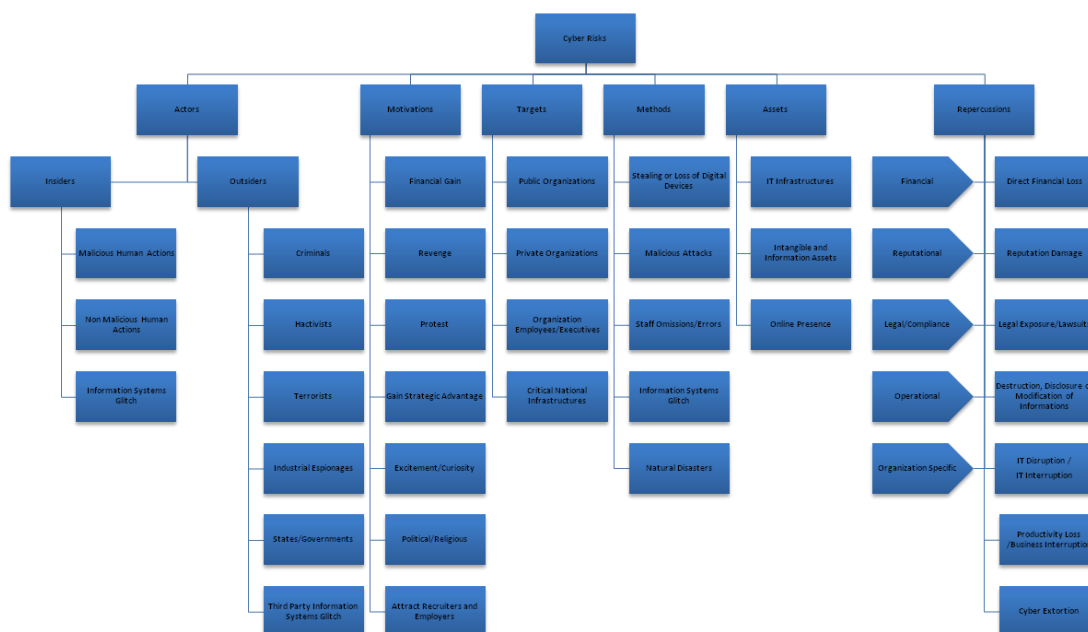


Figure 1: Taxonomy of Cyber Risks

### 3.1 Pillar 1: Actors

First of all, we have to identify the sources of cyber risks of an organization. The threat actors can be divided in insiders and outsiders. The insiders derive from inside of the organization and

are related to human resources and information and telecommunications systems, while outsiders derive from the external environment where the organization operates.

### 3.1.1 Insiders

**Malicious Human Actions:** in this case, a current or former employee intentionally, for reasons that will be explained in Pillar 2, causes or participates in a data breach incident. In the first half of 2015, based on recorded (Gemalto N.V., 2015) data breach incidents, 12% of them are related to this case.

**Non Malicious Human Actions:** in this case, a current or former employee unintentionally causes or participates in a data breach incident due to human mistake or inadequacy security training.

**Information Systems Glitch:** in this case, cyber risks derive from possible system glitches of the business itself. According to Ponemon Institute research (Ponemon Institute, 2015), 29% of all data breaches are caused by system glitches.

### 3.1.2 Outsiders

**Criminals:** the rapid technological developments have evolved the way individuals and groups commit crimes. Criminals using internet can attack anywhere in the world, without requiring physical presence.

**Hacktivists:** persons or groups who use cyberspace to express their ideology

**Terrorists:** the development of digital economy and the growing use of information and communication systems in a variety of national infrastructures has forced several terrorists groups to use cyberspace in order to cause a significant impact or to disrupt national economies

**Industrial Espionages:** Industrial espionage has always been a risk for businesses. With the wide use of information systems and internet, industrial espionage has evolved, while access to business trade secrets can be done remotely and can cause significant impacts very quickly.

**States / Governments:** Governments utilize new technology to achieve their political and military objectives. The word 'cyberwar' constitutes a point of interest more and more frequently in recent years, while worldwide Departments of Defense develop (US Department of Defense, 2015a) Defence Cyber Security Programmes and sections of cyberwarfare.

**Third Party Information Systems Glitch:** this is the case of disruption or breach of third party information systems such as partners, suppliers or providers of other services to the organization. Special attention has to be paid to the case of breach of cloud service provider information systems that organizations use for storing electronic data. In 2014 Ponemon Institute examined the use of cloud computing services by organizations in relation to the data breach incidents and concluded that the use of these services may in some cases have a negative multiplier effect on both the likelihood of a breach incident and the potential costs.

The examination of the first pillar could help the financial planning related to the investments in security. For example, how much to invest in security software, qualified personnel in security or information programs, staff training etc?

## 3.2 Pillar 2: Motivations

The Pillar 2 refers to the major motivations that have been recorded in various surveys or derived from recorded data breach incidents.

**Financial Gain:** one of the main motivation seems to be direct financial gains. As mentioned above is no longer required the physical presence of criminals to rob e.g. a bank or customer accounts. This can be done from anywhere via internet. For example, direct financial gain may be achieved either through transferring funds from bank accounts or credit cards to accounts of third parties or through selling to third parties data from data breaches or through extortion etc.

According to the 2014 US State of Cybercrime Survey (PwC, 2014), in the cases of data breaches conducted by insiders, among the recorded motivations with the highest percentage were financial gain (16%), revenge (10%), curiosity (12%) and excitement (6%)

**Revenge:** former employees who were dismissed or current employees or others who felt wronged by a business or organization may try to revenge by breaching its information systems.

**Protest:** this is the main motivation of hacktivists

**Gain Strategic Advantage:** damage a company's reputation or steal confidential business informations can bring significant benefits to competitors

**Excitement / Curiosity:** there are incidents where someone or a group of people breach information systems just for excitement or even curiosity about the information that can be drawn. This usually occurs in young ages, however older people are not excluding.

**Political / Religious:** terrorists or governments are progressing in cyberattacks aimed to promote or impose their political or religious beliefs. According to U.S. Department of Defense (U.S. Department of Defense, 2015b), in November 2014 North Korea conducted a cyberattack against Sony Pictures Entertainment as a reprisal for the planned release of the satirical film *The Interview*.

**Attract Recruiters and Employers:** in this case, unauthorized access to information systems by a person can be done in order to attract the interest of the organization's administration, highlighting its hacking abilities for future recruitment for IT security or for industrial espionage. There are several websites that publish advertisements for hacking jobs (Goldstein, 2015; Hacker's List, 2015).

Of course there can be combinations of the above motivations.

### 3.3 Pillar 3: Targets

The Pillar 3 contains the targets of cyber risks.

**Public Organizations:** In recent years more and more public organizations use IT systems. This, combined with the fact that public organizations contain a great amount of personal data, exposes citizens to cyber risks. In a recent Verizon's research (Verizon Enterprise, 2015), public sector is at the top of data breach incidents.

**Private Organizations:** As more and more organizations rely on the information and telecommunication systems for their development and expansion, they are exposed to cyber risks especially when the adjustment of the organization's culture in technological development is lagging behind significantly. Moreover, organizations with personally identifiable information (PII) data constitute the main data breach targets and their data breach cost is extremely high (Experian Inc., 2015; JPMorgan Chase & Co, 2015; Soma *et al*, 2009).

**Organization Employees/Executives:** The widespread use of digital devices (eg smartphones, tablets, etc.) and social media from executives of organizations exposes them to cyber risks. Cyber risk actors can use the employee's/executive's digital devices to steal confidential information or use some of this information to overcome the security of information systems of their organizations.

**Critical National Infrastructures:** National infrastructures and other critical infrastructures of a nation (energy supply organizations, stock exchanges (Tendulkar, 2013) etc.) are the main targets of terrorists and governments, in their attempt to enforce political and religious beliefs or strategic plans. The majority of these infrastructures is based on information systems whose disruption or breach could lead to major problems. A typical example is the cyber attack (Airport Business, 2014) that took place in the two international airports in Istanbul on July 26, 2013 at passport control system, resulting in long delays.



### 3.4 Pillar 4: Methods

The 4th Pillar includes the various methods used for unauthorized access, use, disclosure, disruption, modification or destruction of data and / or information systems and communications of an organization.

**Stealing or Loss of Digital Devices:** while a significant amount of confidential personal or corporate informations may be stored in digital devices (such as smartphones, tablets, laptops, usb sticks, external hard drive, etc) used by employees and executives, the theft or loss of them may expose the organization in high risk.

**Malicious Attacks:** this is the most common method for unauthorized access, use, disclosure, disruption, modification or destruction of data and IT systems. It can be done by insiders or outsiders. Some of the most popular (Control Risks Group Limited, 2015) methods are the following: Distributed Denial of Service (DDoS) attack, Single Purpose Malware, Advanced Persistent Threat Campaign, Website defacement, Ransomware.

**Staff Omissions/ Errors:** inadequate staff training on cyber security or omissions can make the organization vulnerable to third parties actions for unauthorized access to its information systems. In this case can also be added the careless use of social media by some employees. For this reason mainly big organizations have started to carry out employee awareness and training programs (PwC, 2015) for cybersecurity.

**Information Systems Glitch:** a malfunction of information systems may expose them to unauthorized access.

**Natural Disasters:** A natural disaster such as earthquake, fire, flood can cause a malfunction or even destroy IT systems, exposing them to cyber attacks.

### 3.5 Pillar 5: Assets

It is crucial for an organization to know which assets are more valuable and exposed to cyber risks.

**IT Infrastructures:** these are the IT systems connected to the local network or internet which support the operation of the organization.

**Intangible and Information Assets:** Intangible and information assets are also assets which the organization have to identify and determine their vulnerability to breach incidents. The disclosure, modification or destruction of employees/customers/supplies details, classified documents and trade secrets can bring in a very unfavorable and costly situation for the organization.

**Online Presence:** the presence on the internet in recent years tends to become one of the major assets (Radding, 2013) of the organizations. Indeed, as already mentioned above, the denial of service attack (DoS attack) is one of the most common methods of malicious attacks.

### 3.6 Pillar 6: Repercussions

The repercussions of cyber risks may be financial, legal, operational (Kaspersky Lab, 2015). In addition, it may have negative impact to the reputation (IBM Corp., 2013) of the organization while there are certain repercussions which are related to the specific characteristics of the organization eg healthcare organizations (ANSI, 2012). If an organization understands this repercussions, the determination of the potential costs of those risks may be easier.

**Direct Financial Loss:** stealing money from an organization through unauthorized access or other methods of malicious attacks to its information systems is one of the most common

consequences. Moreover, direct financial loss may have shareholders since the announcement (Saini *et al*, 2012) of a breach incident can lead to a decrease in the stock price.

**Reputational Damage:** the announcement that an organization has experienced a data breach can harm its reputation because of the loss of consumers and partners trust. This may not only impact the current and future revenues but may also lead to staff leaving to other competitors due to the reputation damage.

**Legal Exposure / Lawsuits:** the loss, disclosure, modification or destruction of digital data can arise lawsuits from shareholders, employees, customers and other third parties. Most States in U.S (National Conference of State Legislatures, 2015; Baker & Hostetler LLP., 2015) have data breach laws requiring from the organizations to provide notifications in case of a data breach event. The potential legal liabilities for organizations that are involved in a breach can reach thousands of dollars especially for those who handle personally identifiable informations (PII). The last years there is a similar trend in E.U (European Commission, 2014) legal framework.

**Distruction, Disclosure or Modification of Informations:** a direct impact of unauthorized access to information systems of an organization is the distruction, disclosure or modification of informations.

**IT disruption / IT interruption:** another impact of cyber risks is the disruption of IT systems which may cause a negative effect on the overall operations of the organization.

**Productivity Loss / Business Interruption:** a data breach incident can lead to productivity loss either due to IT systems malfunction or to employees negative respond or psychology. This case can even cause a business interruption (eg a DDoS attack in online businesses).

**Cyber Extortion:** a data breach incident can lead to blackmail the organization or its employees in order to get either financial or other political or operational benefits.

#### 4. CONSLUSION

In this paper we propose a simple and practical taxonomy of cyber risks, based on recent surveys and data breach incidents, in order to enhance the ability of organizations to clarify these risks. The proposed taxonomy can be a reference framework for researchers and practitioners to evaluate the cyber risks and develop a strategic plan for their effective management. It can be expanded further in order to include the relevant costs of each repercussion of a data breach incident. Finally, this taxonomy may provide a useful structure for future surveys to categorize questions on the preparedness of the organizations on cyber risks.

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## UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY: THE ADOPTION OF MOBILE MESSAGING APPLICATION

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### ABSTRACT

*While mobile penetration was 1% in 1995, this penetration reached 73% in 2014. According to Turkish Statistical Institute, 96.8% of households have mobile phones and smart phones. Opening account of social media, messaging and chatting is the first activity in mobile phone users in Turkey. Consequently, understanding the main determinants of technology acceptance behavior is an important issue for both academicians and practitioners. Therefore, the aim of this study is to test of the model on the adoption of mobile messaging applications, especially fast messaging. We used the framework of Unified Theory of Acceptance and Use of Technology (UTAUT). For testing our hypotheses, questionnaires were given to people having mobile devices and mobile internet users. Our data was collected by convenience sampling method. The research hypotheses were tested by structural equation modeling (SEM). The results indicated that there were strong relationships among the research variables. Finally, theoretical and managerial implications of the study findings are discussed.*

**Keywords:** Adoption of Mobile Messaging, Mobile Messaging, Unified Theory of Acceptance and Use of Technology (UTAUT), Turkey

### 1. INTRODUCTION

The report<sup>1</sup> of Centre of Retail Research points that mobile e-commerce is the fastest growing trade. In 2014, total e-commerce via mobiles in Europe was €23.77 billion, moreover online retailing as a percentage of all retail sales is now 12.7% but this percentage is expected to reach 21.5%. Mobile application market has a very important position in mobile e-commerce. According to report<sup>2</sup> of the MarketsandMarkets, the total global mobile applications market is expected to be worth US\$25.0 billion by 2015; hence the global market is expected to record a CAGR (compound annual growth rate) of 29.6% from 2010 to 2015. The report<sup>3</sup> of eMarketer predicted that mobile phone messaging applications will be used by more than 1.4 billion consumers in 2015 and the growth in popularity of messaging applications will reach 2 billion users and represent 80% of smart phone users by 2018 in worldwide. In the light of these emerging developments, we aim to examine determinants of mobile message adoption and to work it under the framework of UTAUT. The research question is raised: What factors influence the behavior intention and the use of mobile messaging adoption?

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<sup>1</sup> Centre of Retail Research (2016). *Online Retailing: Britain, Europe, US and Canada 2015*. Retrieved 29.03.2016 from <http://www.retailresearch.org/onlineretailing.php>.

<sup>2</sup> MarketsandMarkets (2016). *World Mobile Applications Market Worth US\$25 Billion by 2015*. Retrieved 29.03.2016 from <http://www.marketsandmarkets.com/PressReleases/mobile-applications-market.asp>

<sup>3</sup> Marketer (2015). *Mobile Messaging to Reach 1.4 Billion Worldwide in 2015*. Retrieved 29.03.2016 from: <http://www.emarketer.com/Article/Mobile-Messaging-Reach-14-Billion-Worldwide-2015/1013215#sthash.Sx3sNjo9.dpuf>

This paper offers three main contributions to the literature. Firstly, UTAUT model 2 has been considered less than model 1 in diffusion literature. The study contributes to extend UTAUT model 2. This research tries to complete this gap. Secondly, the determinants of adoption of any mobile applications in Turkish consumers –emerging economy- can be analyzed as a result it will provide better knowledge for diffusion and adoption literature. Finally, the study focus on adoption of specific application that is very intensive in the daily life. So, the results of this study are important for both academicians and practitioners.

## 2. LITERATURE

Both academicians and practitioners have interested in understanding the main determinants of technology acceptance behavior. Venkatesh et al. (2003) proposed UTAUT as an acceptance model after a comprehensive assessment of eight prominent models used in user acceptance of technology (Singeh et al., 2013, p.190): (1) the technology acceptance model (TAM), (Davis, 1986); (2) the theory of reasoned action (TRA), (Fishbein & Ajzen, 1975); (3) the theory of planned behavior (TPB), (Ajzen, 1991); (4) a model combining TAM and TPB (C-TAM-TPB), (Taylor and Todd, 1995a; 1995b); (5) the motivational model (MM), (Davis et al., 1992); (6) the model of PC utilization (MPCU), (Thompson et al., 1991); (7) social cognitive theory (SCT), (Bandura 1986); and (8) the diffusion of innovation theory (DOI), (Rogers, 1962). These theories were tested on diffusion and adoption of several new products or services. Moreover, some of these models focus on adoption of information and communication technologies in particular. Venkatesh et al. (2003) developed a new model by synthesizing eight models focusing on information and communication technologies in particular. Venkatesh et al. (2003) named this model as “Unified Theory of Acceptance and Use of Technology”. The UTAUT model identifies performance expectancy (PE), effort expectancy (EE), social influence (SI) and facilitating conditions (FCs) as direct determinants of behavioral intention and use behavior. The four variables (PE, EE, SI, FCs) directly affect intention and these variables, age, gender, experience and being voluntary, in directly affect the use (Venkatesh et al., 2003, p. 447). Venkatesh et al. (2012) developed UTAUT. Model-2 is the extended form of Model-1. Model-2 added the following new variables to the model; its analysis unit focuses on user acceptance and use; Hedonic motivation (HM), Price-value (PV) and Habit (HB). Venkatesh et al. (2012) asserted that Model-2 is better than Model-1, as the percentage of variance explained in both intention and use. The conceptual model of this study based on UTAUT-2 and the relationship among the research variables is given in figure 1.

**Performance expectancy (PE)** has been substituted perceived usefulness among the construct of TAM. PE is defined as the degree to which on individual believes the system would be beneficial to his/her job performance (Venkatesh et al., 2003). PE is one of the highest explanatory power of variables on behavioral intention (BI) (Helena Chiu et al., 2010). Hew et al. (2015), found that PE had a significant effect on BI to use mobile applications. Der and Mutlu (2015) asserted that PE positively affects BI on mobile shopping.

**Effort expectancy (EE)** is the degree of ease of technology use (Venkatesh et al., 2012, pp. 159-162). EE is based on perceived ease of use from TAM. There is a positive relationship between EE and BI (Martins et al., 2014; Oechslein et al., 2014; Nistor et al., 2014; Escobar-Rodríguez & Carvajal-Trujillo, 2014).

**Social influence (SI)** is defined as “the degree to which on individual perceives that important others (family and friends) believe he or she should use the new system” Venkatesh et al., 2003, p. 451). Defined as recommendation of the people considered important to use the new technology (Venkatesh et al., 2012, pp. 159-162), social influence (SI) assumes that these persons will create positive influence on the adoption through these people’s influencing the individual.

**Facilitating conditions (FCs)** is the degree of belief in the fact that for use of innovation, individual's organizational and technical infrastructure system is available/ready to support the use (Venkatesh et al., 2012, pp. 159-162). Venkatesh et al. (2003, p. 453) defined that FCs are the degree to which an individual believes that an organization and technical infrastructure exist to support of the system. FCs affects both the behavioral intention and use.

**Hedonic motivation (HM)** is the first variable added to the UTAUT-2. HM is defined as »the fun or pleasure derived from using a technology« (Venkatesh et al., 2012, p. 161). HM means that the enjoyment or happiness resultant from using a technology. HM plays an important role in BI for individual's acceptance of a technology (Brown and Venkatesh, 2005).

UTAUT-1 was developed to adopt of a system/innovation in the organizational structure. However, there are significant differences between the consumer use and organizational use. Cost and pricing may have a significant effect on individual's acceptance of technology. For this reason, Venkatesh et al. (2012) added **Price value (PV)** variable to the model. They defined PV as "consumers' cognitive tradeoff between the perceived benefits of the applications and the monetary cost for using them" (Venkatesh et al., 2012, p. 161).

**Habit (HB)** has been defined as "the extent to which people tend to perform behaviors automatically because of learning...", "...HB is viewed as prior behavior and HB is measured as the extent to which an individual believes that the behavior to be automatic" (Venkatesh et al., 2012, p. 161).

By taking into account the framework of UTAUT model 1, the recent paper found out these results. Yang (2010) tested UTAUT model on 400 mobile services users. He found that PE, SI, and FCs were positively related to BI to the use of mobile shopping services. Wong et al. (2013) showed that PE and EE had a direct and statistically significant positive effect on BI. According to Deng et al. (2011), PE and EE positively related to BI, on the other hand FCs related to the actual use on web based question-answer services adoption. Awwad and Al-Mojali (2015) established that BI on electronic library services depended on PE, EE, and SI, while use behavior depended on FCs. While FCs had a significant effect on use behavior, PE and SI had a significant effect on BI but EE did not have significant in the paper of Chang et al. (2015). Lwoga and Kombo (2015) investigated the major predictors of actual usage of an e-learning system but they did not found significant positive relationships between the main factors; PE, EE, FCs and SI and the actual use.

Given the recent paper on UTAUT model 2, Hew et al. (2015) found that PE, EE, FCs, HB, HM had significant effect on BI to use mobile applications. Gao et al. (2015) made an empirical study on wearable technology acceptance and they showed that PE, HM, EE, SI were positively associated with individual's intention to adopt healthcare wearable devices. According to a study made by Wong et al. (2014), EE, SI, FCs, HM, and HB had a significant impact on BI to adopt mobile TV. In the light of these researches:

- H<sub>1</sub>: PE has a positive direct effect on BI in the use of mobile message applications.
- H<sub>2</sub>: EE has a positive direct effect on BI in the use of mobile message applications.
- H<sub>3</sub>: SI has a positive direct effect on BI in the use of mobile message applications.
- H<sub>4</sub>: FCs have a positive direct effect on BI in the use of mobile message applications.
- H<sub>5</sub>: HM has a positive direct effect on BI in the use of mobile message applications.
- H<sub>6</sub>: PV has a positive direct effect on BI in the use of mobile message applications.
- H<sub>7</sub>: HB has a positive direct effect on BI in the use of mobile message applications.
- H<sub>8</sub>: BI has a positive direct effect on Use.

### 3. METHOD

The data of the study was collected along with second author's master thesis. Respondents filled in second questionnaire form. While first form measured adoption of mobile shopping, the second form evaluated the adoption of mobile messaging applications. Our population had to

have smart phone, tablet computer or laptop and mobile Internet users, age +18. Convenience sampling method was used in the study. We collected 344 questionnaires.

The conceptual model based on UTAUT model 2 (Venkatesh et al., 2012). The research variables in UTAUT model 2 was adapted from Venkatesh et al. (2003; 2012) and applied double translation process. PE, EE, SI, HM, PV, HB and BI were measured 3 items and only FCs consisted of 4 items. Total items were 28. All constructs are measured using multiple-item, five-point scales with anchors ranging from Strongly Disagree (= 1) to Strongly Agree (= 5). Reliability of research constructs are sufficient according to Nunnally (1978, p.245) who suggests that Cronbach's Alpha value of 0.70 or better. All constructs demonstrated acceptable reliability scores in Table 1.

#### 4. ANALYSES

Table 1 reports the means, standard deviations, Cronbach's Alpha, and bivariate Pearson correlations of the constructs. We found positive and strong correlations between BI and determinants of mobile messaging adoption.

Table 1: Correlation Analyses

	1 FCs	2 PE	3 EE	4 SI	5 HM	6 PV	7 HB	8 BI	9 USE	10 Age	$\alpha$	Mean	SD
1	1										.90	3.77	.93
2	.659**	1									.84	3.64	.95
3	.786**	.702**	1								.92	3.78	.97
4	.571**	.554**	.547**	1							.85	3.29	.95
5	.626**	.621**	.607**	.492**	1						.91	3.50	.99
6	.661**	.607**	.600**	.474**	.692**	1					.89	3.62	.99
7	.377**	.416**	.411**	.441**	.555**	.448**	1				.86	2.85	1.09
8	.652**	.689**	.650**	.550**	.676**	.636**	.655**	1			.88	3.47	.99
9	.393**	.324**	.349**	.340**	.487**	.413**	.508**	.464**	1		.81	2.84	1.01
10	-.179**	-.199**	-.231**	-.148**	-.231**	-.224**	-.341**	-.204**	-.308**	1	-	29.62	7.81

Structural equation model (SEM) was used to test research hypothesizes. Hair et al. (2010) suggested a set of fit indices used to examine the structural model. As shown in Table 2,  $\chi^2/df$  (the ratio between Chi-square and degrees of freedom), AGFI (Adjusted Goodness of Fit Index), CFI (comparative fit index), and RMR (root mean square residual) of the model fit indices exceed the respective common acceptance but obtained value of GFI (goodness of fit index), NFI (normed fit index), RFI (relative fit index), and RMSEA (root mean square error of approximation) indices had very closely acceptable level.

Table 2: Model Fit Indices

<i>Model fit indices</i>	<i>Threshold</i>	<i>Obtained value</i>
$\chi^2/df$ (the ratio between Chi-square and degrees of freedom)	<3	2.290
GFI (goodness of fit index)	>0.9	0.855
AGFI (Adjusted Goodness of Fit Index)	>0.8	0.818
CFI (comparative fit index)	>0.9	0.939
NFI (normed fit index)	>0.9	0.897
RMR (root mean square residual)	<0.08	0.070
RFI (relative fit index)	>0.9	0.879
RMSEA (root mean square error of approximation)	<0.05	0.064

In this study, PE ( $\beta=.387$ ,  $p<0.001$ ), HB ( $\beta=.430$ ,  $p<0.001$ ) and FCs ( $\beta=.211$ ,  $p<0.05$ ) have a direct effect on BI. BI directly and positively affect behavior use ( $\beta=.523$ ,  $p<0.001$ ). Empirical



research shows that H<sub>1</sub>, H<sub>4</sub>, H<sub>7</sub> and H<sub>8</sub> are supported. In sum, the model constructed in this study is shown in Figure 1.

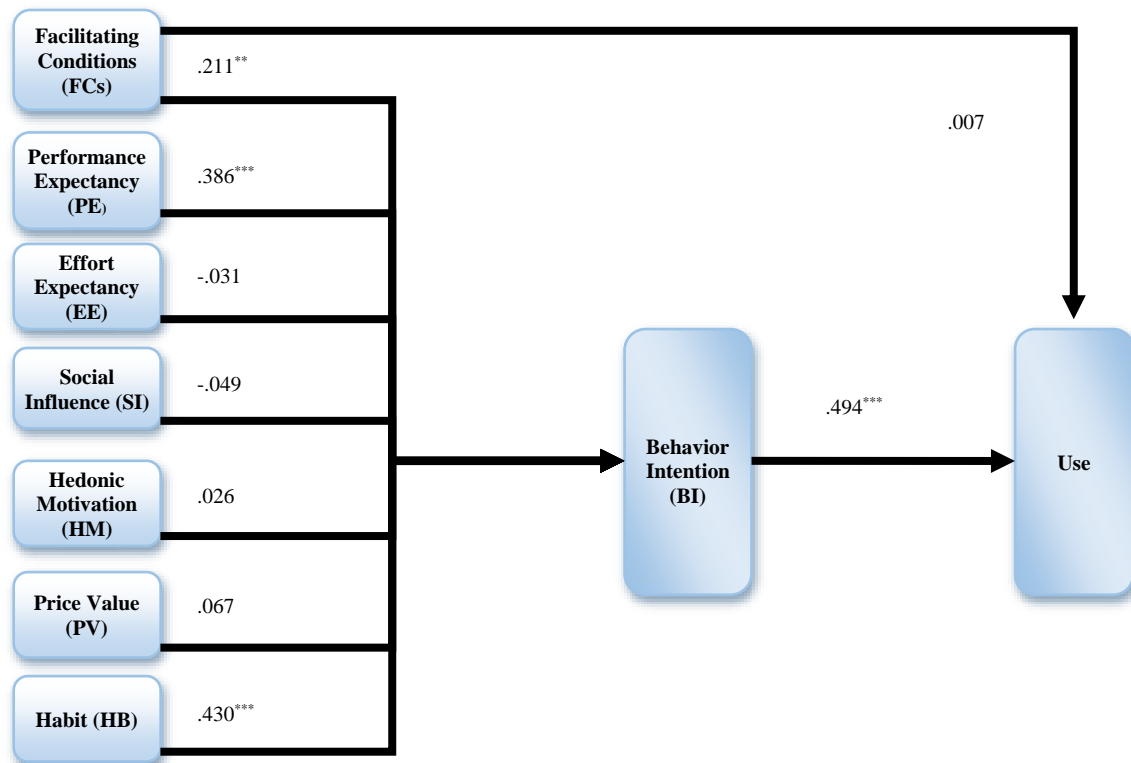


Figure 1: The Conceptual Model and Structural model results

## 5. DISCUSSION, CONCLUSION, AND IMPLICATION

This study based on theory of adoption and diffusion of innovation. Among the main models and theories in the literature on diffusion and adoption of innovation, we preferred to the framework of UTAUT model 2. UTAUT model 2 is suitable to explain consumer' adoption process. We found that PE, EE, and HB play a crucial role in the adoption of mobile messaging applications. Regarding PE and EE, the findings match up with TAM. Mobile message applications have user friendly features –easy use- and usefulness –simple and hassle-free- for customer (Teo et al., 2015). HB was found the most important determinant of adoption of mobile message applications. In literature, HB usually has a significant and positive effect on adoption of mobile or online innovations (Gao et al., 2015; Wong et al., 2014; Escobar-Rodriguez and Carvajal-Trujillo, 2014)

This study has several limitations. The first limitation is the direct effects among variables but has not been discussed in indirect, mediating, and moderator effects. Second limitation is sample method.

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## POSITION AND ROLE OF A WOMAN IN NATIONAL SOCIAL AND ECONOMIC DEVELOPMENT OF SERBIA

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*Since the beginning of the 20th century it is a demographic fact that women represent over half of the population, while in public sphere they are marginalized. Even Hannah Arendt concluded that "in modern society women are the biggest minority" there is. In the domain of rights (in subjective and objective sense of the notion) women of the 20th century have reached an equal status with men in principle, but in the 21st century between formal and actual right there is considerable discrepancy. Her right to work is obstructed, in political, economic or cultural level as well as in any given professional activity, regardless formally and legally ensured equality and basically accepted reality of the need for an enhanced participation of less represented gender on decision-making positions. Printed media in Serbia makes clear they are marginalized, since they appear as expert collocutors almost nine times fewer than men (89.2 : 10.8 percent in favor of men experts).*

*The effect of "glass ceiling" implies invisible yet efficacious obstacle in advancement to the highest organizational positions of women. Statistical data clearly shows that there are still no women in places of actual decision-making, and that they are less paid for the same work in comparison to men, her unequal position is evident from the insight to the company ownership structure, as well as remarkably lower representation on leading positions. Moreover, women have fewer possibilities of advancement in career, and get dismissed more often than men in the process of transition.*

*A woman is sometimes in an inequitable position when it comes to earning income for the exact same work carried out by a man, and she is actually not granted access to all positions and functions in the organization of a society. Therefore it is often a case of using "woman-alibi" in practice, that is directing certain women to high and influential public positions in order to prove there is no discrimination towards women by the society.*

*Nevertheless, without equal, better and more active participation of women, there shall be no faster or advantageous social and economic development.*

**Keywords:** *woman, glass ceiling, economic and social position, inequality*

### 1. INTRODUCTION

It is a demographic fact in modern period of society's development that the number of women is in constant increase in relation to number of men, i.e. for a long time women makes more than half of population, while been marginalized in public sphere. Today, woman can be found in production, from factories to administration and managing position. She is not only irreplaceable support, but an active participant of all changes and movements in modern era. Since the beginning of 20th century, until today, woman has significant active role on worlds, social, economical and political stage.

In the area of rights (both subjective and objective meaning of term) women has achieved, in principle, equal status with men. They were waiting for nearly two centuries that idea of equality

become truly “human right”. However, up to day, there are still discrepancies between formal and real rights. Woman’s right to work is been obstructed, as in political, economical and cultural area, as well as in every other expert acting.

Hannah Arendt affirmed that “woman of modern society is also biggest minority” that exists. Even though mathematically demographic majority, woman in patriarchal society has minority status. French writer Simone de Beauvoir wrote how that authentic human being, by time become “woman” – a victim of tradition in dominant male culture.

As the woman through historical practice generally was excluded from politics, but also from production and all other important functions of society, both through ages theory was neither dealing with (nor giving significance) to the status of woman in given social-cultural and economical environment. Almost whole life of that invisible woman took place inside family, far away from public eyes and public importance, with strictly defined rules according to sex, anent gender (Djordjevic, 1975). In short terms, woman as “woman” is a product of social norms and rules which are male product.

Estimation of a woman as inferior being, formed based on biological and sexual delusions, is expressed not only in, for woman depreciative sayings and songs, but also in conceptions of philosophers, psychologists and statesmen. In that respect, famous misogynist Arthur Schopenhauer is cited, both with Immanuel Kant, Friedrich Nietzsche and Sigmund Freud. For example, Napoleon Bonaparte his opinion on woman, as an inferior being in relation to man, legalized for a whole century in “Code civile”, greatest monument of bourgeois law and code of woman’s imparity.

Therefore, Karl Marx set a thesis, which he took from Charles Fourier, claiming that “level of woman’s emancipation is natural measure of general emancipation” (Marx, 1964)

Today, the position of woman is complex not only because of her economic, but also her demographic role. She is not only labour force, but she must give birth as well. She is simultaneously productive and reproductive power in society (Todorovic-Uzelac, 1987).

Feminists considered that appearance of modern organizations and bureaucratic carriers came as aftermath of specific gender configuration. They denote on two ways of gender implementation into structure of modern organizations. First, bureaucracies are distinguished by gender segregation on work place. When women became significant part of labour force, they were assigned to poor paid working positions on which they performed routine tasks. Chances for promotion were minimal. Second, bureaucratic career, by feminists, alluded male career, in which key part of a woman was giving support. At work place, women performed routine jobs, so men can focus on getting a promotion. In the sphere of family, women also supported career advancement of men – by taking care of house and raising children, so men can focus strictly on work. These two tendencies led to modern organizations become male reservation in which women were excluded from the government, without a chance to advance, and that, in addition, become victims of sexual harassment.

A research which had been performed in 21 countries (Davidson, Burke, 2004) showed that women on managing position are still grouped on lower management levels and in traditionally women’s sectors of care, education and services, and not in those with highest incomes, like energy, information technologies (IT) and transport industry. They are still underpaid to male colleagues on all levels of hierarchy ladder, including board of directors and are hardly make breach through “glass ceiling” which stops them from reaching top management functions and positions. That is also the case in the USA where women take 45% of managing positions, but make only 5% of top management – the percentage with small variations during last quarter of 20th and first decade of 21st century.

Publication of book “Breaking the Glass Ceiling” (Morrison, White, Van Velsor, 1987) in USA, gave new swing to research of women in management. Women gain level of knowledge and experience requested by those positions, paying bigger price than men, but are still facing with

infamous “glass ceiling” (Powell, 1999). So, whilst women, on global level, represent nearly half of labour force, they still represent weak percentage in high managers structure (Wirth, 2001).

In leadership domain, man remains what he used to be during the evolution of mankind – a hunter, not only because he brings more food, but contracts.

## **2. ATTITUDE TOWARD WOMAN AND HER ROLE IN SERBIAN TRANSITIONAL SOCIETY**

During the past millennium, women were subordinated to male domination, witnessed by some theoretical sources, while affirmative documents about women as driving force of society are very rare. So, based on myths, customs and current regulations, it can be concluded that misogyny enjoys long and well established, strong tradition (Kandido-Jaksic, 2001).

Escalation of misogyny (organized, institutionalized hostility or hate toward women) comes also during the transition process. Phenomenon of misogyny spread is one more symptom of Serbian society’s “sickness” and culture of 90’s. Crisis of man’s roles and identities is characteristic for other societies in transition and, on the other side, experience of wars which increased creation of “men communities” and evocation of “warrior’s memory”, with ritual exclusion of women, or their inclusion under conditions that brings them down to “servants of warriors”, created an impulse in Serbia which was, to a certain degree, situational conditioned, but it’s clear that misogyny itself, as occurrence, is not by no means something instantaneous or transient, but with (too)long history.

Wars which were led during the 90’s in former Yugoslavia, UN sanctions, followed by privatization process and transition, brought back women into privacy sphere and distanced them from politics and public life (Torlak, 2011).

Position of women in our society suggests their marginalization, while stereotype pictures of gender relationships supports traditional, polarized gender roles, according to which women are passive, inferior, incompetent to represent official discourse or to offer expert knowledge in the matter of public interest, whilst their achievements are been ignored. Statistic data clearly indicates that women are still not to be found where the decisions are really made, and for the same job they are less paid, have less opportunities to advance, whilst lose their job more often than men during transition process. All this is confirmed in publication by Statistical Office of the Republic of Serbia (SORS) called “Women and men in Republic of Serbia” published in 2014: the women makes 51,3% of total population of Serbia, but are underpaid than men, they work more on wageless jobs than men, they are excluded from decision making processes and are more subjective to poverty. Besides: women are most common in the category “supported person” (57,6%) followed by women whose main income is their pension (57,0%), scholarship (56,5%) and other social incomes (55,5%).

### **2.1. Unemployment structure**

In research by Foundation for the Advancement of Economics (FREN) which was published in 2013, course of employment in Serbia in period 2005 – 2010 has been analyzed, followed by course of unemployment rate by gender and age.

In mentioned research, the rate of an employment has been considered (15 – 64 years of age) according to gender and age in five years period and the conclusions are as follows: the rate of employment of women in April 2010 was 40,2% and is far less than the rate of employment of men (54,3%) although this difference is reduced in period 2005 – 2010. Furthermore, the rate of employment of women in Serbia is lower when compared with 27 EU countries (58,6% in 2009), but also from the rate of employment of women in surrounding countries (Croatia, Bulgaria, Romania).

Rate of unemployment in April 2013 in Serbia grew by 1,7% in regard to October 2012 and is at 24,1% at total, or 22,3% for male and 26,5% for female population (Labour Force Survey, 2013).

Gender imparities are considerably expressed in numerous aspects. They are manifested through insufficient political participation of women, economical imparities, and unequal distribution of commitments in family, unbalanced rate of power in privacy sphere etc. Only 5% of women are presidents of municipalities/majors, and 29% of women are municipal or city alderman. Women are rarely on position of manager of a household: 15,9% of women and 84,1% of men (Blagojevic-Hewson 2011, Babovic 2010).

### **2.1.1. Gender gap in ownership over companies**

According to the data from Serbian Business Registrations Agency, in August 2014 active companies had 217.290 proprietary shares. From that number, only 26,8% (58.205) were owned by women, while the rest of 73,2% were owned by men. Related to research period on entrepreneurship of women from 2011, when women had 25,2% of proprietary shares, these data are showing on extremely small move toward closing of gender gap in ownership over companies.

### **2.1.2. Gender gap on positions of company management**

In order to get a correct insight on gender gap in the matter of company management, it is necessary to focus our attention on the highest managing positions, i.e. positions holding most power in company. Those are usually positions of general manager, and in case of limited companies (Ltd) positions of member in Board of directors. According to data from Serbian Business Registrations Agency from 2014, women were holding 25,8% of highest managing positions, which represents slight increase of share from 22% in 2011.

These findings once again support the fact that women are hard to “breach” to leader position when competition with men is higher, i.e. when there are more candidates for those positions. These findings are in order with previous ones which were showing existence of, so called, “glass ceiling” in vertical mobility of women to highest managing positions in the companies (Babovic, 2007, 2010, 2012). Differences in ownership of proprietary shares of women and men were not noticed to a significant extent between regions nor economy sectors. Smaller changes are registered only in some “typically woman’s” sectors like administrative support and services, health care and social protection and sector of classic services, in which women owns between 30% and 40% of proprietary shares, whilst in other branches this percentage is between 15 and 30% (Babovic, 2012).

Data from 2011 on regional differences, in the matter of persons performing management functions or holding positions in Board of directors in companies, shows that women outside Belgrade region are rarer among directors and significantly rare among members in Board of directors, than in case of companies from Belgrade (Babovic, 2012).

### **2.1.3. Public agencies**

Public agencies are organizations whose founder is the Government and which are founded for purpose of development, expert and regulatory tasks of public interest, and in Serbia there are 170 different agencies.

Observing the composition of management bodies in eight selected agencies, which has been selected based on influence they have on social relationships in economy and society in general and their significance on economical and financial flows in the country (Agency for privatization, Serbian Business Registrations Agency, Agency for Development of Small and Medium-sized enterprises of Republic of Serbia, Anti-corruption Agency of Republic of Serbia, Serbia Investment and Export Promotion Agency, Agency for Energetic Efficiency, Regulatory

Authority of Electronic Media, Regulatory Agency for Electronic Communications and Postal Services), we can see that they have only one woman on position of director, and same situation is with deputy and other higher positions in these institutions.

#### **2.1.4. Public enterprises**

When discussing of public enterprises, Serbia follows bad trend present in other parts of the world, and that is women are represented with only 10% on managing positions in public enterprises.

When discussing the topic about women on high managing positions inside European Union, more and more is contemplating the idea of introduction of quota system in order to increase the number of women in public enterprises' Boards of director up to 40% by the year 2020 ([ec.europa.eu/commision2014](http://ec.europa.eu/commision2014)).

There is not systematic solution for this problem, not even in Serbia. According to data from National Strategy for Improving the Status of Women and Promotion of Gender equality (2009 – 2015), women in Serbia participate with 30,5% on managing positions in society and economy, out of which only 20,8% as directors and as Head of Board of directors only with 14,3% ("Official Gazette of Republic of Serbia")

### **3. "GLASS CEILING" – INVISIBLE, BUT STRONG BARRIER**

The "glass ceiling" effect points to invisible but strong barrier to advancement on highest organizational positions of women (and minorities). This term came into use in feministic economy with an aim to mark gender discrimination in vertical mobility inside organizations, and later widen to other forms of discrimination. According to Rosabeth Moss Kanter, the solution is above all in providing numerical strength. When the percentage of women inside an organization reaches 35%, they become minority group. Then they can form coalitions which can change ratio and culture inside an organization (corporation). Group becomes really balanced on 40%, even better on 50% (R. Moss Kanter, 1977).

By analyzing data, I came to the conclusion that a situation is somewhat better in cultural activities rather than in economy. As for the city institutions, women are usually heads of libraries, schools, kindergartens, museums and centres for social work. For example, out of 19 theatres in Belgrade, only six of them have woman as a director, and out of 35 directors of Belgrade's museums and commemorative collections, nine are woman (Torlak, 2011).

When discussing those employed in education, women are mostly teachers in primary schools, where they make 71,8% of total employees – almost as men on faculties – 70,6%. Since the foundation of Serbian Academy of Sciences and Arts back in 1887, no woman has ever been a president.

### **4. POLITICS AS CREATOR OF SOCIAL-ECONOMICAL RELATIONSHIPS**

It's a common saying that prostitution is an oldest trade, as women trade. But much older and longer lasting trade, as a men trade, is politics. It simultaneously conditionate and kept state in which the woman is, and it (politics) became as limitation as well as mean in struggle for liberation from that condition and for general emancipation of woman (Papic and Sklevicki, 2003).

In former Yugoslavia, back in the 80's, 17% of women were chosen into parliaments, and in period from 1989, after wars and changes, the share of women in political life of whole region plunged dramatically, so women became invisible in public and political sphere of management and decision making – in Serbia only 1,6%. After the elections in 2000, the National Assembly of Serbia and Montenegro had only 10 women, out of 178 deputies.



Although Electoral Law of Serbia from 2004 introduced quota system which alluded that at least 30% of women must be on political parties' candidates list – the woman on leader position of political party is almost not to be found.

Let's say, from 1839 until 2011, only two women were Belgrade's mayor: Dr Slobodanka Gruden (1993 – 1994) and Radmila Hrustanovic (2001 – 2004).

There are almost no women when it comes to decision making, except where the politics is been operationalized. So, they take part in the implementation, but not in the making of decisions. It is significant to emphasize that currently heads of National Assembly of Republic of Serbia and National Bank of Serbia are women, but this research showed that even in the highest bodies of the National Assembly, where all the decisions are been made, and those are Assembly boards and chiefs of Parliamentary groups, is conspicuously smaller presence of women on managing positions. Most obvious discrepancy is noticeable in the matter of chairman of the Assembly boards, where we have 26 presidents and only three female presidents. The same situation is with leaders of Parliamentary clubs, where the ratio is 9:1 in favour of men (Torlak, 2011).

## **5. MEDIA AS MIRROR OF THE REALITY**

The competence of women is most commonly invisible; neither their needs nor their achievements are noticed. Judging by the newspapers, women are not asked for any relevant issue in the society (Milivojevic, 2004). According to the research carried out during 2006 by the Media centre from Sarajevo, Bosnia and Herzegovina, women in printed media from Serbia, Croatia and Bosnia and Herzegovina are present five times less than men. By following three national daily newspapers in all three countries (in case of Serbia those were "Blic", "Politika" and "Vecernje novosti") it has been concluded that as interlocutor – women's experts are present nearly nine times less than men (89,2:10,8 percent in favour of men experts). Also, the media devotes very small percentage of news to women. That percentage never goes over 15%, except in period of elections or celebration of International Women's Day, March 8th. Most present women in the media are the celebrity ones. Women are mostly visible in culture, local crime and entertainment columns. In local crime column, usually because been a victim of violence, and almost none in politics, economy, health care or education columns. If we look more concretely, the journalism is slowly becoming female profession (Jevtovic, 2007). Once, the number of women in this field was negligible, while today their dominancy is visible with a naked eye. Because of that, current disbalance is indefensible (mainly in managing structures and in managing sphere of journalism itself in favour of men) due to its deep roots in more primitive heads, at those who found themselves at influential positions, but with lower education level than women. In local media, misogyny has increased simultaneously with privatization of media and with introduction of political pluralism, which often alluded ruthless struggle on political market, with women under attack by hatred speech in order to eliminate political opponent. Holders of misogynous messages in the local mass-media are not only men. With a feminization of journalistic profession in Serbia, women (a large number of journalists and editors) become accomplices in misogynous acting. In the women themselves often doesn't exist a reflex necessary to recognize misogyny: the woman journalists in media with high number of copies (mostly in tabloids), as well as journalists and hosts of popular TV shows in Serbia create an image of a woman as she is expected to be in the primitive patriarchal environment, or they are been reconciled with certain facts about the place and the acceptance of a woman in society (misogyny as a part of culture in which we live), but there isn't much protest among women due to the expansion of misogyny.

## 6. CONCLUSION

The fact is that women are still noticeable minority in political, economical, social and media life in Serbia, no matter to formally and legally secured equality and generally accepted reality for need to increase participation of less present gender on decision making positions (Mitrovic, 2012). Due to all above mentioned, the role of a state in improvement of women's position in all spheres or living is primary and unchangeable, but big responsibility lies on all members of the society, as well as on public information bodies, because it is obvious that collective prejudices and attitudes must be changed. Changes in the world, and especially in our neighbourhood, unavoidably reflects to our country which is going through transition and transformation phase. Slowly, and depending on validity of priorities, specific situations and social circumstances, it is certain that an attitude about woman must be changed, first as equal sex and gender in every society, including our own. So far, we are witnesses of an asymmetrical power which – in the society dominated by male point of view – comes from differences between genders interpreted on woman's disadvantage. Gender imparity is without a doubt a systematic question and it needs to be solved as key barrier to development and comprisable growth (Oxfam, 2014). From a woman's point of view, all of this is being supported by adopted inferiority, "good manners", education and everything that influence on apperception that these subjects (gender equality) are not to be talked about "because there are more important subjects", and that when everybody else gets better, so shall be to the women. This is why the woman is in unequal position regarding incomes for the same work as a man, without real access to all positions and functions in organization of the society. There are still work positions that are "by default" reserved for men. This is why often in practice there is use of "woman alibi", i.e. on high and influential public positions and functions (but not all), some women are been appointed just to show that there is no discrimination by the society towards women. Frontal confrontation between men's and women's qualities is worthless and harmful. There are qualities of male and female type, but that doesn't mean that we necessarily find first ones at men, and the second ones at women. Female management does not exists, management on women's way – does. Widely observed, implementation of non-discriminative selection for leader positions would lead to greater equity and economical rationality, the characteristics which favour long-term success of organizations. Also, there are results of researches which unmistakably show that the countries in which smaller presence of women on labour market in relation to their number in population, are economically under-developed. A study published by World Bank gives us arguments that gender equality, which allude accumulation of education, health care and property and usage of these contributions with an aim of exploitation of economical possibilities and generating an income, can improve economical efficiency and results in three main ways. First, by removing barriers which restrain women to have same access to education, economical possibilities and productive incomes as men, resulting in wider gains in productivity. Second, reclamation of women's status accelerates many other development results, including ones on behalf of their children. And third, all of this will most likely lead to more representative and inclusive institutions and political choices and therefore to better developing course of one country (Gender Equality and Development, 2012). So it doesn't hurt to say again that economical empowerment of a women, including their stronger participation in labour force, is key for economical growth.

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## THE CREATIVE CLASS AND BUSINESS ENVIRONMENT: A CROSS-NATIONAL STUDY

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### ABSTRACT

*Economists, sociologists, political scientists, development practitioners and a myriad of others have noted the economic development policies built around the creative class becoming more prevalent. These policies are often implemented at the city, regional, and country level. While several studies have demonstrated economic success associated with these policy implementations, not all countries have benefitted equally. Furthermore, as the level of analysis gets larger, additional social and economic complexities may challenge a creative class model. Using a cross-national sample of 59 countries, we examine the quantitative associations between creative class dimensions (technology, talent, and tolerance) with business environment. Our findings provide partial support for creative class theory, finding that technology and tolerance are positively associated with business environment after controlling for certain social characteristics.*

**Keywords:** *creative class, economic development, business environment*

### 1. INTRODUCTION

Richard Florida's (2002) book the rise of the creative class initiated a paradigm shift in the development literature. Attention to the creative class has refocused attention for economic development away from lowering business costs via incentives and towards fostering creative environments to drive the economy (Florida 2005). Additionally, the creative class approach is unique compared to other theorized predictors of development such as social capital and even human capital (Florida 2005). In line with creative capital theory, the regional acquisition or creation of talent, technology, and tolerance creates economic winners and losers dictated by the quality of place (Florida 2005).

The idea has gained much attention in terms of economic and social development literature (McGranahan and Wojan 2007; Wilson and Keil 2008; Hoyman and Faricy 2009). Policy makers have responded by implementing creative based policies (Hoyman and Faricy 2009, Currid-Halkett and Stolarick 2011). While Creative class theory has gained significant traction in the literature, several have challenged the theory based on theoretical and methodological points (Brenner and Theodore 2002; Maliszewski 2004; Wilson and Keil 2008; Zimmerman 2008). As a result, additional research is needed to clarify the benefits, limitations, and applications of the creative class approach.

Our study focuses on talent, technology, and tolerance (the three T's) of creative class development (Florida 2005; Florida 2002). We focus our analysis on the relationship between the three T's and business environment within 59 countries. We choose to examine creative class theory at the country level of analysis. Creative class studies often focus on cities and regions (Florida 2005). By focusing on countries, we wish to test the fit of creative class theory on a larger level of analysis. Countries, with their additional complexities seem qualitatively different to their smaller counterparts. Part of what makes application of creative class theory difficult to apply to a cross-national comparison is the mobility of creative class workers. Florida (2002) points out how creative people tend to cluster in creative centers. Migration to creative centers within a country, such as cities, seems to be logistically easier to accomplish compared to migration across countries' boundaries. However, given Florida's creativity index, we are able to compare variations in technology, talent, and tolerance across countries. Thus, we see application to the country level of analysis as different compared with previous studies focused on cities and regions. Countries may certainly cultivate creativity via policymaking centered around the Three Ts, giving them a creative comparative advantage. Therefore, an analysis at the national level is appropriate and necessary to understanding economic situations. The creative composition of a country may attract or discourage a different type of investment and internal business climate.

While previous studies have looked at cross national comparisons and the creative class, many of those studies examine variation with a country or across a small number of countries (Marlets and Van Woerke 2007; Mellander and Florida 2007; Marlets and Van Woerke 2004). Additionally, we opt to disaggregate talent, technology, and tolerance from the larger Global Creativity Index (GCI), created by the Martin Prosperity Institute, in an effort to understand which aspects offer greater explanations in variation of business characteristics. While studying the aggregated GCI is interesting, disaggregating the concept into its dimensions makes the analysis more manageable and telling. We are able to see which creative dimension explains greater variation in business environment and job satisfaction. Furthermore, the disaggregated approach may give policy makers a more precise understanding how each relates with business environment, and thus which to focus on developing.

## 2. LITERATURE REVIEW

Creative class theory began its ascent with Richard Florida's (2002) popular and influential book *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community, and Everyday Life*. The book transformed academic and practitioner understandings of how quality of place, with regard to creativity, is an important component to development. Florida separates the creative class into two distinct groups: The creative core and the creative professionals. The creative core he defines as "people in science and engineering, architecture and design, education, arts, music, and entertainment whose economic function is to create new ideas, new technology, and/or new creative content." (Florida 2002, 8). The creative professionals are "people engaged in complex problem solving that involves a great deal of independent judgment and requires high levels of education or human capital." (Florida 2002, 8). This includes people from business and finance, law, health care, and similar fields (Florida 2002). The common thread between both groups is a creative ethos which is expected to drive economies. Florida (2005) discusses the dimensions of the creative class in terms of technology, talent, and tolerance.

Several studies have pointed out the economic advantages that are associated with the creative class (Florida 2002; Florida 2005; McGranahan and Wojan 2007; Gabe, Florida and Mellander 2012). Florida's theory departs from previous theory of economic development such as

lowering operating costs of an area for business, social capital, and human capital (Florida 2005; Florida 2002). While a human capital approach may offer the closest comparison to the creative class approach, differences exist. Those individuals with human capital and creative capital tend to overlap, 75% of U.S. college graduates are creative class members (Florida 2014). However, Florida (2014) points out that 40% of the U.S. creative class does not have a college degree. Florida, Mellander, and Stolarick 2008 point out this complimentary, yet distinct group leads to differing outcomes. They find that human capital is more advantageous in generating income and wealth whereas creative capital is more useful generating wages and productivity (Florida, Mellander, and Stolarick 2008).

The occupations based creative class approach has been demonstrated much in terms of U.S. economic development (Stolarick and Currid-Halkett 2013; Gabe, Florida, and Mellander, 2012). After controlling for education (human capital), Gabe, Florida, and Mellander, 2012 found that the creative class was less likely to be unemployed compared to individuals in the service and working sectors of the economy. Stolarick and Currid-Halkett (2013) studies 369 U.S. metropolitan areas through five distinct economic periods. They found that cities with higher concentrations of the creative class were more resilient, having lower unemployment rates during economic downturns. Their models suggested that creative class composition was better able to explain this resilience compared to human capital approaches (Stolarick and Currid-Halkett 2013). However, their study conceded high multi-collinearity between human capital (measures in percentage of BA degrees or higher) and the creative class (Stolarick and Currid-Halkett 2013). McGranahan and Wojan 2007 used a more sophisticated operationalization of the creative class and unique statistical techniques. They found creative occupations were positively related with economic growth in both metropolitan and non-metropolitan areas (McGranahan and Wojan 2007). Beyond their methodological refinements, McGranahan and Wojan (2007) also demonstrate applicability of a creative class framework to rural areas.

Aside from human capital, social capital has been shown to related with economic development (Tiepo, Nah, and Reimer, 2004; Putnam, 2000; Narayan, 1999; Putnam, 1993; Stiglitz, 1996), more economic equality and stability (Casey and Christ, 2005), successful businesses (Besser, 1999) as well as more socially responsible businesses (Besser, 1998). The social capital approach is similar to creative class theory in that we can look at social capital as an attribute of place. The relationship between social capital and the creative class appears to be conceptually less murky (more theoretically distinct) compared to the relationship with creative class and human capital. Florida (2005) sees social capital as an alternative viewpoint where development is based on the strength of social ties in a community. Florida (2005) points out how certain aspects of social capital (namely bonding social capital) may inhibit economic development. Florida (2005) argues that creative class theory explains more than social capital and human capital approaches.

In addition to being applied to rural areas, creative class theory has been applied cross-culturally and/or cross nationally. Several cross-cultural studies have yielded support for the theory (Mellander and Florida 2007; Marlets and Van Woerken 2004). In their study of 257 European union regions, Marrocu and Paci (2012) found educated people working in creative industries contributed to efficiencies in production. The creative spillover to other industries is not necessarily equal. Lee's (2014) study based in the UK found that creative industries related with both wage and employment growth for rural areas but only wage growth in urban areas. This may suggest certain declining industries may be pushed out of urban areas (Lee 2014). Mellander, Florida, and Rentfrow (2011) conducted a cross-national study looking at the

creative class and perceptions of happiness. They found that after holding GDP per capita constant, tolerance related with life satisfaction. When they separated high and low income countries, they found the creative class variable were more useful in explaining variations in life satisfaction in high income countries whereas GDP per capita (income) was more useful in explaining happiness in low-income countries (Mellander, Florida, and Rentfrow 2011).

### 3. Methodology

We opted to conduct our study at the country level of analysis. Using countries for analysis provides a unique perspective since much of the creative class research has been done focusing on cities and regions. Our study used a valid N of 59 countries (see table 1).

#### *Dependent variable*

Our dependent variable in this analysis is business environment. This variable was created by the Economist's Investigative Unit (EIU) and is used in forecasting business environment from a foreign investment perspective (EIU 2014). The EIU's business environment model collects data from 82 countries (EIU 2014). The EIU's (2014) report on business environment ranking included an overall business environment score (between 1 – 10, with 10 being the best business environment). The EIU's measure for business environment was seen as advantageous because of its multifaceted composition. According to the EIU (2014), the business ranking model covers 10 categories/criteria ranging from "political environment, the macroeconomic environment, market opportunities, policy towards free enterprise and competition, policy towards foreign investment, foreign trade and exchange controls, taxes, financing, the labour market and infrastructure." (8). Each category contains indicators based on the previous and upcoming five years. In total, the business environment ranking is comprised of 91 indicators. Each indicator is scored on an ordinal five-point scale where one is "very bad for business" and five is "very good for business" (EIU 2014: 8).

#### *Predictor variables*

Predictor variables in our model center on Florida's creative class theory. Our predictor variables are talent, technology, and tolerance at the country level of analysis. Specifically, we use the creative class indicators created by the Martin Prosperity Institute (MPI). The MPI is a think tank focused on characteristic of place as it relates to global economic prosperity (MPI 2011). MPI data is advantageous for this analysis because the variables are operationalized consistent with creative class theory. The MPI examined each of the three Ts and an overall composite general creativity index for 81 countries. We opted to use their disaggregated dimensions of creative class theory variables instead of a combined creativity measure. This was done because the three T's may work in theoretically different ways or have potentially differing relationships with economic development. The MPI ranked countries by their levels of technology, talent, and tolerance. In order to create a normal distribution, we took the log function of these rankings. Additionally, to establish a time order, we use the 2011 creativity variables ensuring the predictor variables precede the dependent variable in time.

#### *Control variables*

Additionally, we controlled for social characteristics that might explain variations in business climate. These included variables for median age, percentage of the population which was female, population density, international migrant stocks, and social support. Social support was used as a proxy measure of social capital, which had been demonstrated to related with economic development. By doing so, we are able to see whether the three T's of the creative class or social capital (operationalized as social support) explained greater variation in business environment. We opted to exclude strictly economic/business control variables as not to create

a tautology whereby we would find that countries with good economic/business positions lead to good business climates.

#### 4. ANALYSIS

In order to test our hypothesis, we ran descriptive statistics, bi-variate correlations, and multiple regression models. Bi-variate relationships are located in Appendix A. Table one displays the descriptive statistics. This includes the control variables, predictor variables, and the dependent variable. For each of the included variables, we list the N, mean score, and standard deviation. The descriptive statistics allow us to see roughly how the data is distributed. Despite certain variables having significantly larger Ns, this chart also displays the valid N (59), meaning the final number of cases with data for each variable in the analysis. This is important for running bi-variate and multi-variate statistics.

Table 1: Descriptive statistics

Variable	N	Mean	Std. Dev
Median Age	181	27.76	8.37
% female	190	50.08	2.56
Population density	213	374.96	1791.28
International migration stock	209	10.93	16.15
Social support	151	79.97	12.98
Technology (log)	80	1.88	.394
Talent (log)	80	1.91	.404
Tolerance (log)	79	1.91	.402
Business environment	81	6.57	1.16

Valid N = 59 countries

Something evident in the literature was the potential for high multicollinearity (Lee 2014; Stolarick and Currid-Halkett 2013). We excluded control variables such as education which had been shown to overlap with the talent variable (Stolarick and Currid-Halkett 2013). To ascertain the extent multicollinearity was present in our study, we ran multicollinearity diagnostics. Multicollinearity is very problematic when VIF statistics are above 10 and/or tolerance statistics are below .1 (DeMaris 2004; Myers 1986). Our highest VIF statistic was 2.7 and our lowest tolerance statistic was .37 suggesting multicollinearity was not a major issue in our analysis. Table two displays the multiple regression models. It displays the statistical relationships between predictor variables and control variables with the dependent variables. We used the SPSS statistical program to conduct this analysis. The table reports standardized coefficients (betas) and t-values for each of the relationships. Additionally, the F-statistic and adjusted R<sup>2</sup> are reported. Levels of significance as indicated at the .01, .05, and .1 level of significance. Having a small valid N (59), we opted to follow the lead of Mellander, Florida, and Rentfrow (2011) and include the .1 level of significance. For purposes of our analysis, we ran two models. Model one displays the control variables in regards to the dependent variable (business environment). Model two includes both the control and predictor variables. Each model also displays the adjusted R<sup>2</sup> and the F-statistic. The F-statistic explains the overall significance of each model. The adjusted R<sup>2</sup> displays the variance of business environment explained by variables in each model. Something that stands out is the adjusted R<sup>2</sup> in both models one and models two. This indicates variables in our models are explaining considerable variations in business environment. The adjusted R<sup>2</sup> is high, suggesting a good fit for the models. The adjusted R<sup>2</sup> appears consistent with other studies of the creative class (Lee 2014; Mellander, Florida, and Rentfrow 2011).



Table 2: Multiple Regression

Dependent variable: EFI 2014 Business Environment Score		
	<b>Model 1</b>	<b>Model 2</b>
	Std. $\beta$ (t-value)	Std. $\beta$ (t-value)
Median Age	.454(4.3)	.085 (.671)
% female	-.035(-.263)	-.135(-1.25)
Population density	.167(1.84) <sup>^</sup>	.181(1.76) <sup>^</sup>
International migration stock	.164(1.19)	.085(.735)
Social support	.259(2.54)*	.232(1.99) <sup>^</sup>
Technology (log)	-	.354(2.86)**
Talent (log)	-	.02(.167)
Tolerance (log)	-	.246(2.12)*
<b>Adjusted R<sup>2</sup></b>	<b>.49</b>	<b>.66</b>
<b>F-Statistic</b>	<b>16.27**</b>	<b>14.74**</b>

\*\* = .01 level of significance    \* = .05 level of significance    <sup>^</sup> = .1 level of significance

When interpreting our findings we found partial support for our hypothesis, namely that two of the three Ts were significantly related to the EIU's business environment score for 2014 – 2018 (see model two). More specifically, Technology ( $\beta = .354$ ,  $p < .01$ ) and Tolerance ( $\beta = .246$ ,  $p < .05$ ) were positively related with business environment whereas talent was not significantly related. This means as countries in our model gain technology and tolerance, it is related with more favorable business environments. Moreover, technology and tolerance explained more change in business environment than did other significant control variables. Of the two significant predictor variables, technology explained the most variation in business environment. We also controlled for social support. This variable was included as a proxy measure for social capital, a concept often associated with economic development (Tiepo, Nah, and Reimer, 2004; Putnam, 2000; Narayan, 1999; Putnam, 1993; Stiglitz, 1996). Consistent with the literature, social capital was positively associated with business environment ( $\beta = .232$ ,  $p < .1$ ). However, technology and tolerance explained more variation in business environment compared to social support. Lastly, population density was positively associated with business environment ( $\beta = .181$ ,  $p < .1$ ). Median age, percentage of the population female, and international migration stock percentage were not significant in either model one or two.

## 5. DISCUSSION, LIMITS, AND CONCLUSIONS

The findings in our analysis are interesting and provide partial empirical support for creative class theory cross-nationally. This study supports the finding of previous work demonstrating a link between the creative class and economic development (e.g. Florida 2014; Lee 2014; Stolarick and Currid-Halkett 2013; Gabe, Florida, and Mellander 2012; McGranahan and Wojan 2007; Florida 2002). This analysis did not, however, affirm a link between the talent dimension of the creative class and business environment. More research will be needed to determine the context talent explains such variation. The authors argue that by disaggregating dimensions of the creative class, we gain more insight into the relationships (or lack of relationships) with business environment.

Aside from the predictor variables, the significant control variables provide interesting findings. Social support (a proxy measure for social capital) was found to be significantly related to business environment. This supports social capital's theorized relationship with economic development (Putnam 2000). Initially, we planned to control for human capital as well since it also often relates with economic development, though opted to exclude it due to potential multicollinearity with the talent indicator (Stolarick and Currid-Halkett 2013). Furthermore, this study found a positive relationship between population density and business environment. Perhaps higher population density creates an environment conducive for the development of technology and tolerance.

There are some limitations in our study that must be addressed. First, our analysis focused only on direct relationships. It is very possible that relationships between predictor and control variables which partially explain our findings. For example, while talent was not directly related to business environment in our model, it is possible that places with more talent (e.g. high levels of education) are more tolerant. Mellander and Florida (2007) used path and structural equation models to demonstrate this relationship, however, perhaps more debate can be had over the causal logic (e.g. does tolerance create talent or visa versa?). Similarly, if places have high levels of between-group (bridging) social capital, theoretically we would expect those places to be more tolerant as well (Putnam 2000). Additional research is needed to tease out the indirect relationships and their relationship with business environment. Additionally, our study had a relatively small valid N (59 countries) compared to studies conducted at smaller levels of analysis. While this is true, we believe the N is appropriate for countries level of analysis. Also, having a small N reduces the chance of statistical significance compared to studies at smaller levels of analysis potentially containing thousands of cases. In any case, readers should be careful making generalizations to countries outside our study or different units of analysis.

In conclusion, this analysis provides insight to the relationship between technology, talent, and tolerance (the three dimensions of the creative class) and business environment. In doing so, we provide partial support for the link between creative class theory and business climate. Through studies such as this, we are able to gain knowledge on the contexts where creative class theory contributes to favorable economic climates. Aside from the theoretical lessons gleaned from this study, policymakers may find its conclusions useful. While countries are certainly different compared to cities and regions (where migration may be easier), countries are in a position to develop dimensions of the creative class. Based on our findings, we would advise policy makers to focus on advancing technology and tolerance promoting initiatives. It is important to continue the theoretical and methodological refinement of creative class theory. Through the continued studying of the creative class, we will learn more about characteristics that relate with economic development, thereby informing academics and policymakers alike.

*Appendix following on the next page*

## Appendix A: Correlation Matrix

	Median Age	% female	Population density	International migrant stock %	Social support	Technology (Log)	Talent (Log)	Tolerance (Log)	Business environment score
Median Age	1								
Population, female (%)	.169*	1							
Population density	.203**	0.052	1						
International migrant stock (%)	.240**	.496**	.357**	1					
Social support	.525**	-0.047	0.008	.237**	1				
TechnologyLog	.603**	0.084	0.136	.468**	.468**	1			
TalentLog	.649**	0.156	0.176	.337**	.459**	.744**	1		
ToleranceLog	.384**	-0.023	0.134	.273*	.494**	.436**	.507**	1	
Business environment	.630**	-0.024	.267*	.334**	.535**	.686**	.598**	.635**	1

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## EFFECTIVENESS OF ZERO LOWER BOUND POLICY IN EUROPEAN FINANCIAL MARKETS

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### **ABSTRACT**

*The paper examines new circumstances in European financial markets, with special amplify on unconventional measures of monetary policies. After the effective implementation of different kinds of quantitative and qualitative easing in US market, ECB and other European central banks try to boost domestic economy and aggregate demand with lowering their major reference rate at zero level. Additional, number of major central banks in Europe have set key policy rates at negative levels in order to further encourage lending by making it costly for banks to hold excess reserves at their central banks. Amid negative policy rates, nominal yields on some bonds of highly-rated European governments have also dropped below zero. This paper quantifies the impact of the most important ECB's non-standard monetary policy measures on asset prices in the euro area and globally, with effectiveness of Zero Lower Bound policy - ZLB on transmission channel to asset markets, including a portfolio balance channel and different risk channels. After the first package of measures, ECB decided to intensify asset repurchase program, with bigger scale of money liquidity and structure of purchasable financial instruments.*

**Keywords:** *Asset prices, ECB, Financial markets, Monetary policy, Zero lower bound rates*

### **1. INTRODUCTION**

After the first indications of the global financial crisis in 2007 and its intensification one year later (the bankruptcy of one of the largest investment banks – Lehman Brothers), new circumstances were generated, which called for the implementation of non-standard and unconventional measures of monetary policy by the most significant central banks in the world. Addressing the issue of insufficient international liquidity and boosting the weak aggregate demand implied the establishment of new mechanisms that would be at the central banks' disposal within the scope of their instruments. After September 2008, in the aftermath of the mentioned bankruptcy, the financial market, in particular money markets have been hit by a considerable increase in insecurity and panic.

Effectiveness of transmission mechanism of monetary policy was brought into question given that the financial market players ended up in the position of a “liquidity trap”. Such circumstances called for a swift and decisive reaction of monetary authorities. In addition to carrying out expansionary monetary policy by means of traditional instruments (including, for instance, reduction of reference interest rates), the central banks presented a set of the so-called non-standard measures in order to adequately adjust to the current developments. The mechanism and forms of these measures somewhat differ among the central banks involved, but, despite this, they all strive towards the same objectives – support to the financial markets and prevention of the financial systems' disruption, which would in the mid term threaten the macroeconomic and price-related stability. In the euro area, the economic and financial collapse escalated into a sovereign crisis in 2010. At that time, markets started questioning the solvency of countries with large fiscal deficits and high debt, and a feedback loop between banking and sovereign credit risk started.

Many central banks responded to the global financial crisis in 2008 by setting a substantially lower trajectory for policy rates. This was particularly true in advanced economies, where the initial effects of the financial crisis were felt strongest. While Japan already entered this period

with close-to-zero rates, the Federal Reserve, ECB and the Bank of England, responded by cutting rates aggressively. By the end of 2012 all four central banks had interest rates below unity, with Japan and U.S. almost at zero.

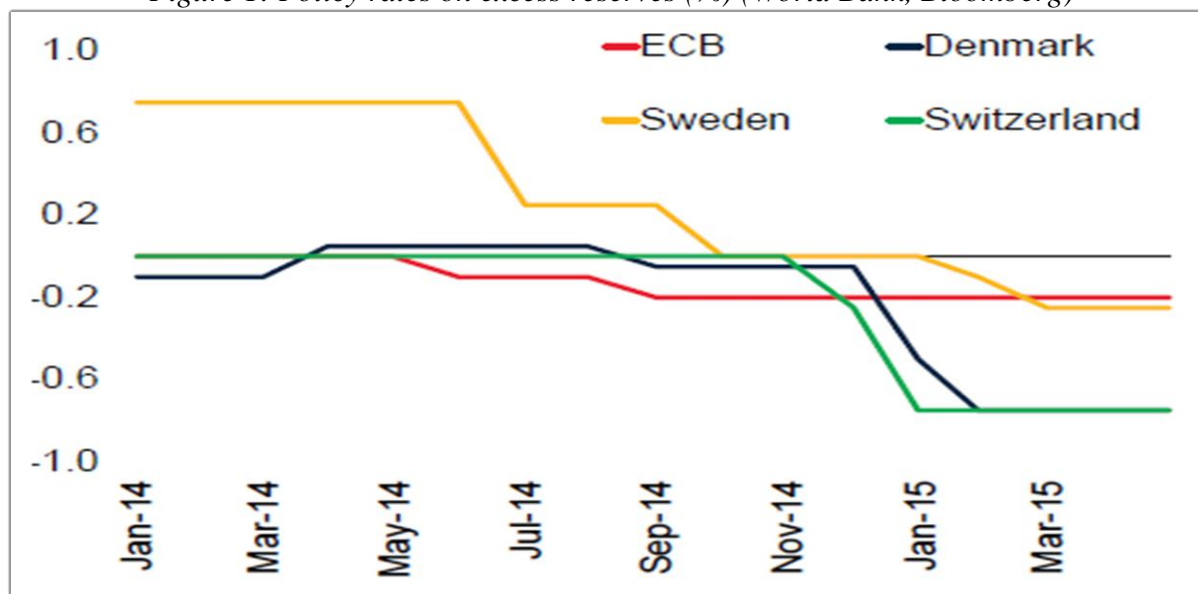
## 2. PHENOMENON OF NEGATIVE INTEREST RATES

When policy interest rates came down to almost zero and central bank balance sheets expanded due to large-scale market interventions in the wake of the global financial crisis, the consensus was that this unconventional monetary policy would be temporary. More than seven years later, the prospect of normalisation seems remote in most advanced economies.

A number of major central banks in Europe have set key policy rates at negative levels in order to further encourage lending by making it costly for banks to hold excess reserves at their central banks. Amid negative policy rates, nominal yields on some bonds of highly-rated European governments have also dropped below zero. Explanations for the phenomenon of negative yields include very low inflation, further “flight to safety” toward fixed income assets in Europe’s core, and—perhaps the main proximate cause—the increased scarcity of highly-rated sovereign bonds eligible for the European Central Bank’s asset purchase program. Negative rates may help boost exports by encouraging currency depreciation and may support lending and domestic demand by further easing credit conditions. At the same time, they could also have some adverse consequences for financial stability through an erosion of bank profitability, through funding problems for some non-bank financial institutions, and through excessive risk-taking by investors seeking a higher rate of return. Potential implications for developing countries include a search for yield supporting capital inflows, which could help offset the impact of liftoff in U.S. policy interest rates.

As an additional measure to stabilize inflation expectations and stave off the risk of deflation, a number of major central banks in Europe—including the European Central Bank (ECB), the Danish National Bank (DNB), the Swedish Riksbank, and the Swiss National Bank (SNB)—have pushed key short-term policy rates into negative territory. Amid these movements, yields on some sovereign bonds at relatively short maturities in several European countries—including Austria, Denmark, Germany, the Netherlands, and Switzerland—have also fallen below zero. Negative interest rates have been an extremely rare phenomenon: even during the Great Depression, U.S. short-term rates were never negative, and during the height of the recent global financial crisis in 2008 some U.S. Treasury bill yields only very briefly fell below zero. In June 2014, the ECB pushed the policy interest rate applied on its deposit facility below zero, with an additional cut in September 2014 (Figure 1). In February 2015, the Riksbank also cut its deposit rate below zero. The main motivation for these decisions was to further ease the already accommodative monetary policy stance to fight the growing threat of deflation amid downward pressures to inflation expectations in the second half of last year and into early 2015. The SNB and DNB have also taken similar actions at different points in the past, albeit for slightly different reasons. The DNB, which maintains its currency within a narrow fluctuation band around the euro, was actually the first central bank in Europe to set its deposit rate below zero—in July 2012, in response to rising capital inflows amid heightened financial stress in the Euro Area (Global Economic Prospect, 2015, p. 3). It pushed the rate down again to negative territory in September 2014, following the ECB. The SNB set its deposit rate below zero in December 2014 amid currency appreciation pressures, and pushed it further down in January 2015 when it abandoned the Swiss franc’s cap against the euro.

Figure 1: Policy rates on excess reserves (%) (World Bank, Bloomberg)



The implementation of these negative policy interest rates have a common element. Commercial banks normally hold deposits at their central bank as settlement balances for clearing payments, or to meet legal minimum reserve requirements. Central banks normally pay interest—a “deposit rate”—on commercial banks’ excess reserves (reserves above the minimum level). During normal times, banks usually minimize holdings in such excess reserves, because central bank deposit rates are below typical money market rates. In the more uncertain environment since the global financial crisis, and with money market interest rates at very low levels, some banks have chosen to hold higher balances at central banks. That is, some of them have been holding excess reserves because of heightened risk aversion, and because the opportunity costs of hoarding reserves—in terms of profitable lending opportunities—have been quite low, given the low returns on assets and the sluggishness of economic activity.

The four aforementioned central banks are now charging (instead of paying) commercial banks for their excess reserves. Negative deposit rates should provide some encouragement to banks to buy alternative assets, and hence to put upward pressure on prices of such assets and further downward pressure on yields and borrowing costs. This would be transmitted through the economy by a general easing of credit conditions. However, negative policy rates have distinct implications for sovereign bond yields and, crucially, for financial stability.

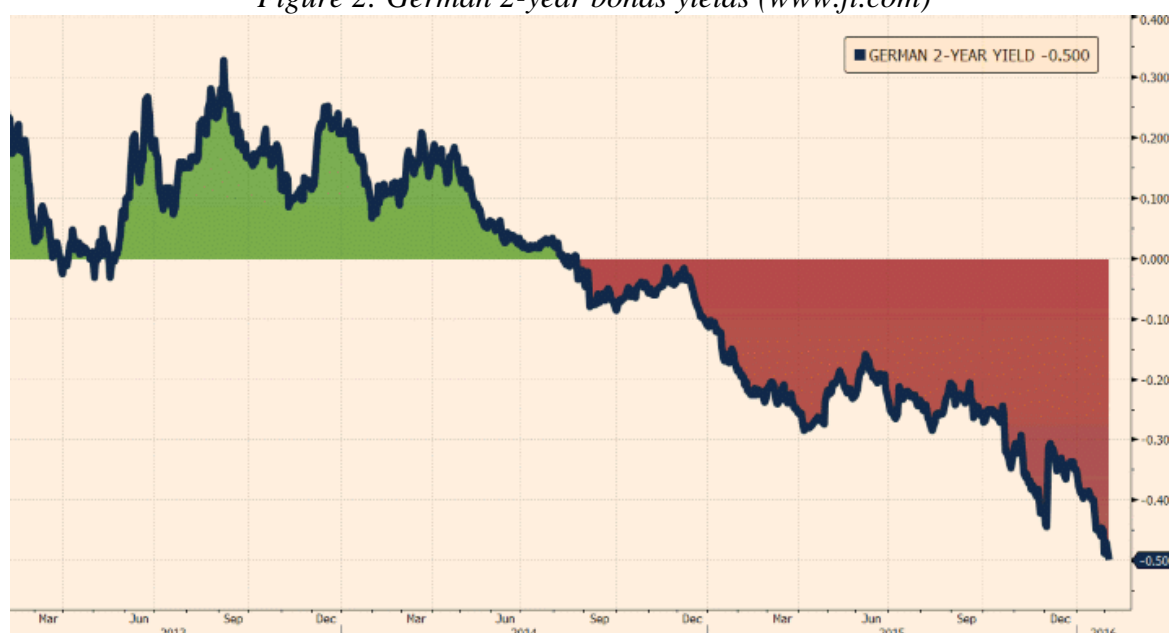
### 2.1. Implications on sovereign bond yields

Negative policy rates in the Euro Area, Denmark, and Switzerland have been accompanied by negative market rates on government bonds, particularly at the shorter end of the yield curve. For example, the 2-year bond yields on highly-rated European countries such as Austria, Denmark, Germany, the Netherlands, and Switzerland have been negative during the first half of 2015. Besides the role of negative policy rates, there are several potential explanations for the emergence of negative yields, particularly those beyond the short-end of the yield curve. These include very low inflation, the persistence of the international “savings glut,” and further “flight to safety” toward low-risk fixed income assets. In consequence, sovereign bonds of certain countries in Europe that are deemed risk-free have been in heavy demand.

Key reason for negative sovereign yields in core European countries appears to be technical—a result of demand pressures stemming from the ECB’s Extended Asset Purchase Program (look at Chapter 3), which is in turn a consequence of the design of the program. Over €1 trillion of purchases will mainly be of sovereign bonds, following a defined allocation, and strict

eligibility criteria. These criteria prohibit purchases beyond 25 percent of the outstanding amount of individual securities, 33 percent of any given issuer's debt, and of bonds with yields below the ECB's deposit rate, currently set at -40 basis points (ECB, 2016). This lower yield limit is to ensure that purchases are implemented broadly across eligible bonds, and to curb speculation on future declines in bond yields. Such speculation would encourage holders, including banks, to hoard bonds. While the ECB deposit rate might establish a lower bound for bond yields, rising demand and limited supply of highly-rated sovereign bonds could bring their yields well below that rate, such as German 2-year bonds (Figure 2). In addition, since bonds can be used as collateral in repurchase agreements, they have additional value which could keep them attractive with materially negative yields (Global Economic Prospect, 2015, p. 5). Investors may hold instruments with negative returns for various reasons, such as for speculative and arbitrage reasons, institutional and regulatory requirements, or simply for lack of alternative assets.

Figure 2: German 2-year bonds yields (www.ft.com)



## 2.2. Implications on financial activities and stability

Broadly speaking, central banks use policy interest rates to achieve, over the medium term, a level of real interest rates that is consistent with a rate of inflation in line with policy objectives and a level of economic activity close to its full potential. Such levels of real interest rates might be negative in an environment of weak domestic demand. With inflation remaining below target, they could require maintaining nominal policy rates at or below zero, along with the implementation of unconventional measures to bring longer-term rates further down, including asset purchase programs.

Thus, some of the effects of negative rates are qualitatively analogous to those of very low but non-negative rates. First, insofar as negative nominal rates help keep real interest rates below the neutral level, they can boost consumption and investment. Second, the positive cash flow effects of low or negative nominal rates permits increases in spending by liquidity-constrained firms and households. Third, low or negative policy rates may help stimulate lending, as evidenced by the recent pickup in credit in the Euro Area. Fourth, declines in domestic interest rates from any level can trigger a depreciation of the currency, as suggested by the fall of the euro vis-à-vis the dollar amid negative German yields which boosts exports. Fifth, in countries concerned about capital flow-driven appreciation pressures (e.g. Switzerland and Denmark),



they discourage capital inflows. In addition to these effects that are largely intended by policy makers, negative nominal interest rates may have undesirable side effects on financial stability and capital market functioning (Keister, 2011).

### 3. ECB AND UNCONVENTIONAL POLICIES

Since August 2014, ECB has started new turn in monetary policy, from passive monetary accommodation of the gyrations in the demand for liquidity by the banking system to active expansionary push, a development unprecedented in the short history of this supranational institution. A number of carefully crafted official statements prepared the ground for the new monetary policy measures by explaining at length the rationale behind them and the measures that would be resorted to under different circumstances. Most revealing is the speech delivered by ECB President Mario Draghi in Amsterdam in April 2014 where he explained that “when central banks come up against the effective lower zero bound (for short-term interest rates), the possibility disappears to use current changes in the short rate to signal the policy response to a changing inflation outlook... Thus, it becomes more important to communicate directly about future interest rate changes... i.e. to give forward guidance (Draghi, 2014).

In the second and third quarter of 2014 the eurozone economy unexpectedly stalled, with some peripheral countries falling again in recession. Headline inflation rates continued to creep downward, with negative rates spreading to more countries and fueling fears of price deflation. The decisions of the ECB in the ensuing months closely followed the Amsterdam announcement. Over summer 2014, the interest rates on main refinancing operations - MROs and on the deposit facility were lowered by 20 basis points, respectively to 0.05% and to -0.20%, while the rate on the marginal lending facility was reduced by 45 basis points, to 0.30%, in line with the Governing Council's forward guidance.

A new series of targeted longer-term refinancing operations - TLTROs were announced in June 2014, with ECB funding tied to the provision of credit to the real economy. This funding was made available through two windows, in September and December, to be followed by further windows between March 2015 and June 2016. It was provided for up to four years, initially with a small surcharge over the MROs rate (10 basis points), which was subsequently eliminated (in January 2015).

In fall 2014 the ECB also launched two private sector asset purchase programmes, an asset-backed securities purchase programme (ABSPP, starting in November) and a new covered bond purchase programme (CBPP3, starting in October), both expected to last for at least two years. In both cases, the purpose was to encourage greater lending to the private sector by strengthening the incentive to supply loans that could be securitised at attractive conditions (in markets still largely impaired) and by facilitating bank funding at comparable terms. The amounts involved were initially rather small (altogether, about €32 billion by end-2014), but the purchases were to continue at a stable rate of €10 billion per month (Table 1).

*Table following on the next page*

Table 1: The allocation of monthly asset purchases by the Eurosystem (Micossi, 2015, p.30)

Bonds	Bondholder	Monthly purchases	Total purchases	Notes
ABS & covered bonds	ECB	€10 bn	€190 bn	Risk on ECB
European institutions	ECB	€6 bn (12% of 50)	€114 bn	Risk on ECB
Euro area central governments and agencies	ECB	€4 bn (8% of 50)	€76 bn	Risk on ECB
Euro area central governments and agencies	NCBs securities purchases allocated according to the ECB's capital key	€40 bn (80% of 50)	€760 bn	Risk on NCBs; purchases to be limited to 25% of new issues and 33% of total outstanding debt
<b>Total</b>		<b>€60 bn</b>	<b>€1.14 tr</b>	

Eventually, the continued weakness of the economy and the repeated downward revisions in the HCPI rate of increase, which in December 2014 turned negative for the eurozone average, catalyzed a broad consensus in the ECB Governing Council to take the plunge into quantitative easing (QE). On 22 January 2015, they announced the decision to launch an expanded asset purchase programme (EAPP) under which the ESCB would purchase every month €60 billion of private and government securities assets – thus including the two programmes already started the previous fall – for a period beginning in March 2015 and ending in September 2016. Expanded asset purchase programme (APP) adds the purchase programme for public sector securities to the existing private sector asset purchase programmes to address the risks of a too prolonged period of low inflation. It consists of (Table 2):

- third covered bond purchase programme (CBPP3)
- asset-backed securities purchase programme (ABSPP)
- public sector purchase programme (PSPP)

Monthly purchases in public and private sector securities will amount to €80 billion (from March 2015 until March 2016 this figure was €60 billion). They are intended to be carried out until the end of March 2017 and in any case until the Governing Council sees a sustained adjustment in the path of inflation that is consistent with its aim of achieving inflation rates below, but close to, 2% over the medium term (ECB, 2016).

Table 2: Eurosystem holdings, in euro million, under the expanded asset purchase programme (ECB, 2016)

	ABSPP	CBPP3	PSPP	APP
<b>Holdings* February 2016</b>	18,571	158,321	597,529	<b>774,421</b>
<b>Monthly net purchases</b>	421	7,819	53,059	<b>61,299</b>
<b>Quarter-end amortisation adjustment</b>	1	-503	-2,565	<b>-3,067</b>
<b>Holdings* March 2016</b>	18,994	165,638	648,022	<b>832,654</b>

#### **4. TRANSMISSION CHANNELS OF UNCONVENTIONAL MONETARY POLICY**

While the non-standard measures introduced by the ECB since June 2014 are relatively diverse in nature, the broad transmission channels through which they are expected to affect the economy are similar, albeit activated to varying degrees by the different measures. A large body of literature, focusing primarily on asset purchase programmes, has identified a number of possible channels through which non-standard measures might influence inflation and output, such as direct pass-through, portfolio rebalancing and signalling channels.

First, via the direct pass-through channel, the non-standard measures are expected to ease borrowing conditions in the private non-financial sector by easing banks' refinancing conditions, thereby encouraging borrowing and expenditure for investment and consumption. This channel is perhaps most prominent in the case of the targeted longer-term refinancing operations - TLTROs, which are designed to reduce banks' marginal cost of funding for the targeted lending activity. The targeting features of the TLTROs incentivise banks to increase their supply of specific types of net lending to the real economy, which ensures that at least part of the funding cost benefit is passed on to borrowers. Asset purchases, particularly of the type included in the credit easing package, can also affect the credit conditions faced by the private sector. Central bank purchases increase the price of the targeted covered bonds and asset-backed securities: this encourages banks to increase their supply of loans that can be securitised, which tends to lower bank lending rates.

Second, via the portfolio rebalancing channel, yields on a broad range of assets are lowered. Asset purchases by the central bank result in an increase in the liquidity holdings of the sellers of these assets. If the liquidity received is not considered a perfect substitute for the assets sold, the asset swap can lead to a rebalancing of portfolios towards other assets. Through a chain of such portfolio rebalancing attempts, asset prices rise until a new equilibrium is reached, implying lower yields and costs of external financing. Portfolio rebalancing may support the expansion of bank lending, as the compression of yields on securities renders lending a relatively more attractive proposition. The increased supply of bank lending lowers its cost. The empirical importance of this channel has been tested in works focusing mainly on the financial market impact of quantitative easing policies. Most of the studies have found evidence supporting the relevance of this channel (Altavilla et al, 2016).

Third, via the signalling channel, the deployment of non-standard measures, particularly those that have a sizeable effect on the central bank's balance sheet, serves to underscore the monetary authority's commitment to its mandate. This can have two effects. First, it can trigger a downward revision of market expectations for future short-term interest rates. In the case of the ECB's asset purchase programmes, this is because of the long period of ample liquidity implied by the maturity profile of the assets purchased. In the case of the TLTROs, this is related to the fixed rate of the operations and their long maturity, which was four years for the initial operations. Second, it may anchor or, as the case may be, increase inflation expectations. The result is that real long-term rates will be lower, thereby supporting investment and consumption.

#### **5. CONCLUSION**

Unconventional, zero-lower bound policy, have successfully improved the credit conditions in the euro area and supported the ongoing recovery in lending activity. Different models of Assets repurchase programmes – APP have significantly lowered yields in a broad set of financial market segments. The long-term bank funding and the acquisition of longer-term private and public sector securities through the APP have had effects on a range of asset prices which generally increase with maturity and riskiness. Reductions in bank bond yields, i.e. less expensive market-based financing for banks, have improved their funding costs, enabling a more forthcoming bank attitude towards lending. In practice, the elimination of illiquidity and abnormally high spreads and mark-ups in malfunctioning credit markets has incentivised banks

and other lenders to pass the funding cost relief on to final borrowers in terms of higher credit flows and better lending conditions. For instance, a sizeable impact is estimated for long-term sovereign bonds, with ten-year yields declining by about 70 basis points for the euro area, and roughly 100 basis points for Italy and Spain. The spillovers to yields of untargeted assets are significant in the case of euro area financial and non-financial corporate bonds.

There is also easing pressure on other financial market prices, such as the exchange rate and equity prices. Announcements of the APP are estimated to have led to a depreciation of the euro by 12% against the US dollar. It is also estimated that there was a positive impact on the euro stock market index of 3% in the case of the TLTROs and 1% in the case of the APP (ECB, 2015).

Overall, the non-standard measures in ZLB policy have helped push the intended monetary policy accommodation through the intermediation chain to reach final borrowers, i.e. household and firms. This contributes to the recovery in lending and economic activity, which is expected to produce a sustained adjustment of inflation rates towards levels below, but close to, 2% over the medium term.

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## ALBANIAN BUSINESS ACCESS TO BANK CREDIT

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### **ABSTRACT**

*Commercial banks in Albania have been continuously the major formal financing source for the enterprises in Albania. During the last years, due to the impact of the global economic crises, Albanian business has suffered the lack of liquidity. On the other hand, after a long period of credit expansion, the non-performing loans in the banking system have been increased. In 2014, non-performing loans accounted about 23 percent of the total bank loans. Therefore commercial banks in collaboration with the Bank of Albania, have restricted their lending criteria. The businesses are suffering the consequences of these measures, having difficulties in financing and expanding their activity. The paper will analyze the bank lending activity between several sectors of the economy and several types of business, based on the secondary type data, published by the Bank of Albania and Institute of Statistics of Albania. The second part of the paper will present the main factors that affect the business during the borrowing process such as the interest credit rates, the value of collateral, the bank lending procedures, their activity, their size, their experience etc., through a questionnaire carried out in Tirana, where the major part of the enterprises exercise their business activity. Some conclusions and recommendations in order to improve the business-bank relationships will be presented in the end of the paper.*

**Keywords:** bank credits, collateral, commercial banks, interest rates

### **1. INTRODUCTION**

Albania is an upper middle income country according to the World Bank classification, with a GDP of USD 13.21 billion. In 2014 the Albanian economy was estimated to have grown 2.42% in annual terms. Domestic demand growth is estimated as the main component driving economic growth. The improvement in terms of the economic activity has not been reflected yet in the labour market, as the unemployment rate rose to 18% from 17.1% in the previous year. Developments in the external sector of the economy contributed negatively to economic growth. After years of a stable inflation rate of 2%, in 2014 annual inflation fell to 0.7%, reflecting low inflationary pressures from both internal and external economy, which have imposed to Bank of Albania to pursue an accommodative monetary policy during 2014. During this period of economy recovery, the business is considered as the motor of economic growth. Albanian business is experiencing a liquidity crises, while the banking system is reported to have a lot of liquidity, which can be used to put in motion the business. The aim of this paper is to point out some of the problems that impede the bank credit access of businesses in Albania. The second section of the paper describe the profile of the enterprises in Albania, regarding their size, activity, legal form and ownership. The evolution of bank lending activity is presented in the third section of the paper. The fourth section discusses finding of a survey, regarding the factors that affect the Albanian business access to bank credit. The conclusions are presented in the last section of the paper.

### **2. BUSINESS PROFILE IN ALBANIA**

After the radical political and economic changes in Albania in 1991, the open market economy replaced the planned centralised one. The country entered toward the road of privatization of state enterprises. Since the major part of the labour force has been unemployed and there was no hope of being employed by the public sector, Albanian citizens started their own small

business, mainly in the trade sector. In 2014, there were operating 112,537 enterprises in Albania. About 89.77 percent of them are micro-businesses, employing no more than 4 persons, 4.79% are small business employing from five to nine persons, 4.19% are medium-sized enterprises employing from 10 to 49 persons, and the rest of 1.31% are large companies employing more than 49 persons. The major part of micro-business in Albania are of familiar type. The number of enterprises in Albanian has been continuously increasing, despite the actual non-favourable macroeconomic conditions. Until 2005, there were operating about 27,586 enterprises in Albania. During the last decade the number of enterprises has been in increased about 15% every year.

The major part of the enterprises in Albania are operating in the trade sector (40%), service activities (16%), industry and construction, as Figure 1 shows.

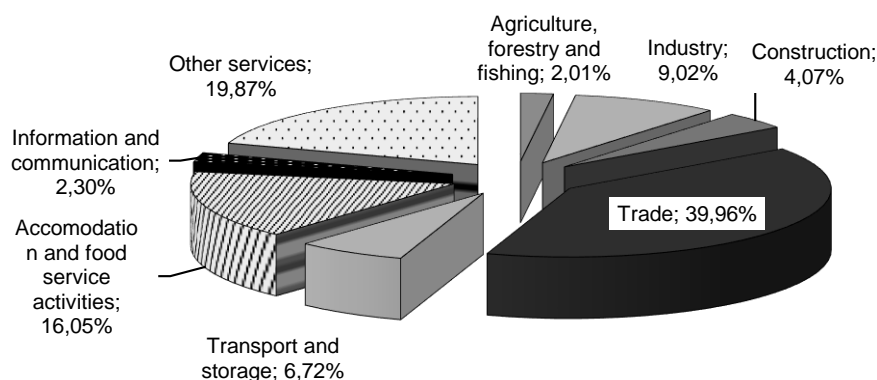


Figure 1: Enterprises by sector of economy (INSTAT)

Regarding the legal form, 76.11 percent of the enterprises are registered as physical person and only 23.89% are recorded as juridical persons. Among the companies recorded as juridical persons, 78.69% are limited liability companies and only 3.25% are joint stock companies. The small number of stock companies in Albania is due to the non-development of financial markets and the lack of the stock exchange. Tirana stock exchange has been opened in 1996, but due to non-functioning, it has been closed in 2013.

At the end of 2014, about 3.1% of active enterprises were foreigner companies and 1.57% were joint venture businesses (64% of them were foreign dominance capital). About one third of foreigner and joint companies exercise their activity in the trade sector, followed by the industry and construction sector. 71.55% of companies with foreign capital are micro business, whereas only 5.61 percent are large companies, employing more than 50 persons. The foreign and joint venture enterprises comes mainly from Italy (43%), Greece (12.2), followed by Turkey, Kosovo, USA etc.

### 3. BANK LENDING ACTIVITY

Albania has a bank-based financial system. The bank system assets account more than 90 percent of the whole financial system. There is no stock exchange (it has been opened in 1996 and then closed in 2014) and the other financial institutions are not well developed. The bank loans constitute the largest asset of commercial banks and the main sources of their revenues. The lending activity nourishes the economy of the country. But if the loans are not repaid, they threaten the bank performance, and the economy development as whole. According to the statistics, the bank lending activity, expressed as ratio of the domestic bank credit to GDP, has been increased especially after 2005. After 2000, foreign capital entered in Albanian banking system through privatization of existing state commercial banks and opening new branches of foreign banks. The first main consequence of the foreign bank entrance was the expansion of

bank loans. As one bank increases its assets by expanding loans, other banks may follow, and the result may be a global acceleration of credit growth in a country. In December 2014, the outstanding loans of the banking sector pointed at ALL 595 billions and the annual growth rate was 4.93%. In 2014, about 74% of total lending was accorded to business. The credit boom in Albania occurred between 2004 and 2009. The impact of a rapid credit growth on the ratio of non-performing loans to the total volume of loans is significant and can be observed several years after the credit boom (Serwa, 2013).

Historically, the bank lending activity is oriented toward the business. Until 2012 the share of businesses loans to the total loans is increasing, while during the last four years it has stopped to 74%. The Table 1 shows the loans accorded by branches of economy. The most credited businesses are those of trade, repair of vehicles and household appliances, followed by construction and processing industry.

Table 1: Loans by branches of economy in % of total loans (Bank of Albania)

Branches of economy	2008	2010	2012	2014
Business loan	65%	70%	74%	74%
Processing industry	9%	10%	11%	11%
Production and distribution of electrical energy, gas and water	6%	5%	9%	10%
Construction	14%	14%	12%	10%
Trade, repair of vehicles and household appliances	22%	24%	25%	25%
Other sectors	15%	17%	18%	18%

The analysis of business loans by purpose of use (Figure 2) shows that business overdrafts had the largest share, followed by business loans for real estate investment.

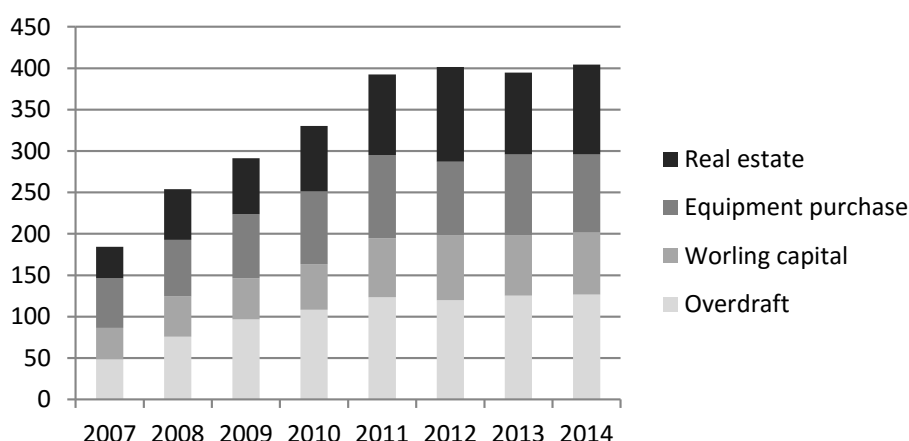


Figure 2: Lending by purpose of use (Bank of Albania)

According to the statistics of Bank of Albania, in 2014, 71% of the loans have been secured loans. 70 percent of the secured loans had real estate as collateral coverage, 28.1% use cash as collateral and the rest use other assets as collateral.

The non-performing loans have been significantly increased immediately after 2008, recording the maximum figure in June 2014, with a ratio of 24.1%. In December 2014, non-performing loans ratio fell at 22.8%. Stock of non-performing loans fell at ALL 135.7 billion. Non-performing business loans ratio has been higher than non-performing total loans ratio (Figure

3). The maximum value of non-performing business loans has been recorded in 2013, with ratio of 27% of total loans.

The non-performing loans continued to migrate to “loss loans” category, during 2014. In December 2014, loss loans accounted for about 52% of non-performing loans.

In December 2014, the collateral coverage, an important hedging factor against credit risk, was 73%. Loans with real estate collateral, accounted for 60% of total collateral-based loans. Notwithstanding at satisfactory covering rate, banking sector continues to remain sensitive to the well-functioning of the real estate market and the collateral execution process. In 2014, the non-performing loan collateral coverage ratio was about 74%, almost the same as total loan collateral coverage ratio.

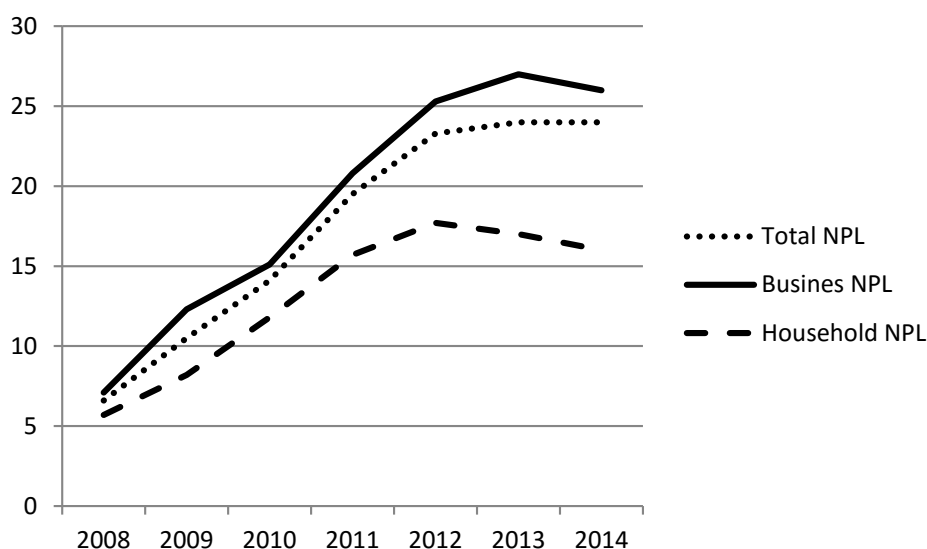


Figure 3: Non-performing loans in % of total loans (Bank of Albania)

In order to manage the problem of non-performing loans, Bank of Albania and Government of Albania in collaboration with International Monetary Fund, have taken several prudential measures. In 2013, Bank of Albania designed a package of measures consisting of three pillars: legal pillar, monetary pillar and prudential pillar. Legal pillar - The rapidly increase of non-performing loans during recent years, reflects a number of problems about collateral execution. For this reason, the Bank of Albania proposed amendments to the Civil Code and Code of Civil Procedure, aiming at improving the collateral execution process. Monetary policy pillar – Bank of Albania has continually pursued a stimulating monetary policy, as long as inflationary pressure remains weak, using the key interest rate, as the principal instrument of monetary policy. Prudential pillar – The prudential measures influence directly and swiftly on credit revival. It includes a number of measures that will release financial resources to banks and encourages them to channel those resources toward lending. These prudential measures included the reduction of bank requirements for liquid assets and the changing of risk coefficients in the investments structure to boost lending. According to the instruction of the Bank of Albania, the commercial banks have been shown active in the process of written off loss loans from their balance sheets (non-performing loans which were set no longer than three years). The government of Albania has been involved in this process too. One of its priorities has been the payment of the public debt to business. But due to the lack of liquidity, the business did not fully paid the loans owned to the banks and the non-performing loans were not declined as expected. However the improvement of the financial position of the business is expected to have a positive influence on the business-bank relationships in the future.



#### 4. FACTORS AFFECTING THE BUSSINESS ACCESS TO CBANK CREDIT

Several empirical studies have shown that Albanian business, especially the small medium one, is relied on the internal funds as the main financing source. The aim of this questionnaire is to identify the factors that influence on the business access to bank loans. The survey was conducted in the city of Tirana, where 44% of enterprises are located. 200 enterprises have been under survey: 1% were large business, 5 % were medium-sized business and the rest was composed of micro and small sized business. The questionnaires have been directed to the owners of the businesses, as they are the persons who apply for the credit financing. According to the survey results, about 38% of the questionnaire businesses have never applied for bank credit. Only 23% of the businesses which have applied for the bank credit, have obtained the loan from the bank. The business which have not provided the credit, were asked to rank the specific factors that have affected the refusal of their loan application. The maximum scores (six) are accorded to the most significant factor and the least scores (one) are pointed to the least significant one. The results of the survey are summarized in the Table 2.

Table 2: Factors affecting the credit access (Author survey)

Factor	Collateral	Documentation	Experience	Interest rate	Procedures duration	Size
Scores	741	152	188	588	112	214

*Collateral* - The requirement for collateral has been reported to be the biggest problem faced by Albanian business to get a loan from the commercial banks. The banks require to secure financing with collateral. The most preferred category of collateral is the real estate such as building or land. As one third of the surveyed business, do not operate at their own building/store (they have rented it), they find difficulties in providing the collateral. As more than 80 percent of the surveyed business are family business, they are not likely to risk, pledging their personal assets, like home. The value of the required collateral is considered very high by the businesses. The commercial banks require a value of collateral from 140% to 200% of the total amount of the loan. Therefore, especially the small and mediums sized business, practically do not have too much access to the bank credit financing. *Interest rates* - More than 50 percent of the credited business consider the interest paid for the loan relatively high. In order to stimulate the lending activity, the key interest rate has been continually used by Bank of Albania as an monetary policy instrument. From 2007, Bank of Albania has undertaken 15 consecutive key interest cuts. The key interest rate is reduced from 9% in 2009 to 1.75% in 2015. However, the banks have been more sensitive to these cuts regarding to the deposit interest rate. While the lending interest rates have not been proportionally reduced. *Size* - The questionnaire revealed that almost all the medium and large business have obtained at least one loan from commercial banks. While, only 15% of the micro and small business have been able to obtain a bank loan. It is obvious that the commercial banks in Albania, regarding their lending activity, are more oriented toward the large business than small ones. *Experience* - In general, in order to get the loan, the business should submit the financial statements of the last three years. Automatically, the enterprises in the early-stages of business, do not provide such information. Therefore about 50 percent of the interviewed business, are of the opinion that the short history of their business, has been one of the factors that has influenced in their credit application refusal. *Documentation* - In order to get the loan, the business owner has to prove that he has the ability to repay the loan. For this reason, the banks require a detailed financial information for the last three years at least. As the most part of the enterprises are small ones, the owners dot have financial and economic backgrounds. Therefore they need to hire a professional accountant in order to prepare accurate balance sheets and cash-flow statements.

The poor and improper documentation is reported from almost the half of the business as one of the reasons of not obtaining the loan from bank. *Bank procedure duration* - One third of the interviewed business are of the opinion that the bank lending procedures are prolonged and time-consuming. During the last years, as the banks have tighten their criteria for lending activity, the lending procedures are taking more time. The maximum reported period is 3 months.

## 5. CONCLUSION

Despite the unfavourable economic conditions during the last years, the number of enterprises in Albania is increasing. Within a decade the number of business is quadruplicated. They are operated more in the sector of trade and service. After 25 years of market economy, the major part of the business rely on internal funds to finance their activities. Bank credit is considered as the primary source among the external financing forms. However, as more than 90 percent of the Albanian business are micro and small sized enterprises, they have difficulties in obtaining loans from commercial banks, especially during the last years, when banks have revised their lending criteria. Banks lent mainly to the industry (energy) and services (trade, hotels and restaurants) sectors. The two most important factors, which impede the business to get a bank loan, are considered the value and the category of required collateral and the high interest rates. The government and the Bank of Albania have to stimulate the transparent and effective financial reporting practices from the businesses. Financial transparency can help businesses to receive credit as the banks will have more information to which to base their lending decision. As result the commercial banks will tend to reduce their requirements for high level of collateral, and small and medium business in particular will benefit more funds from banks.

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## ANTECEDENTS AND STATE OF THE ART OF COMPETITIVE DYNAMICS

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### **ABSTRACT**

*The field of competitive dynamics has been actualized in recent years, and there are several main reasons for this. It sophisticatedly reveals competitive behavior among firms in „market battle” with its rivals. Moreover, competitive dynamics field studies competitive moves and reactions which are measurable and contribute to cumulative findings. It also examines interactions among competitors, focusing not only on actions but also on the responses elicited. Thus, competitive dynamics is one of the few areas of strategy study quintessentially longitudinal. Also, it has benefited from several frameworks that enrich our understanding of the forces driving competition. Finally, competitive dynamics is one of the drivers for potential better connection with other areas of strategy and organization (Chen and Miller, 2012). Purpose of this paper is to show the antecedents and theoretical assumptions of development of the stream of competitive dynamics and to give insight of the most relevant authors and findings in the last 3 decades of this stream, but also give critics on the whole work so far.*

**Keywords:** *Competitive dynamics, strategic management, state of the art*

### **1. INTRODUCTION**

Several streams of scientific research have emerged in the strategic management field from the 1980s. In contrast to the traditional approaches, competitive dynamics research emphasizes competitive actions of a firm as the main object of study. The roots of this focus on individual actions could be found in Schumpeter (1942) work on competition, which he used to describe the dynamic process by which firms act and react to one another within the market.

Indeed, Schumpeter highlighted the fall of the firms through the process of mutual undertaking competitive moves and responses. Leaders act and rivals respond, and these actions and reactions determine survival and long-term performance. The focus was on the process by which a market moves toward and away from equilibrium. Austrian economics viewed advantage as transient, with a limited temporal window for exploitation.

After Schumpeter and Austrian school representatives, number of authors begun to conduct researches on competitive dynamics, exploring new causalities and interdependencies in this stream by every new study. In those studies many models and concepts were invented which enriched this stream, and gave new insights on rivalry among firms and their market behaviour. Regarding that, we are emphasizing the developing process of the competitive dynamics, main research themes and authors whose work contributed in emerging this scientific stream.

### **2. THEORETICAL ASSUMPTIONS ON THE COMPETITIVE THEORIES OF STRATEGIC MANAGEMENT**

The area of strategic management, observed in a broad sense, is the basis of the present study. Strategic management was founded as a consequence of the fact that in the second half of the 20<sup>th</sup> century the growing influence of the external environment in the process of making long-term decisions could not be ignored, but had to be extremely respected (Buble, 2005). The environment in which the firm then existed was becoming more dynamic, complex, heterogeneous and uncertain, therefore its impact had a crucial importance for the survival of the firm. Consequently, in the early 1960s systematic research has begun making this area

relatively young academic discipline. By analyzing the historical development of the scientific discipline it can be said that after its beginning the discipline intensively develops in the 1970s, when the strategic management was directed towards the design and implementation of strategies, and merged the terms "long-term planning", "management of new jobs", "planning, programming, budgeting" and "business policy" and thus expanded the approach which led to changing the name of the subject from "business policy" to "strategic management" (Buble, 2005). Then in the 1980s, attention was focused on identifying strengths and weaknesses and search for the optimal position of the firm within a specific market or industry in which it operates.

The last 30 years was characterized by the emergence of a large number of new theories and approaches to strategic management. Its common characteristic was a deflection from defining content and processes according to the descriptive view of the process of creating strategies. The stated descriptive schools were focused on the internal environment of firms and intangible elements of the processes such as innovation, organizational culture, managerial control, the ability to acquire new knowledge and skills, business vision, etc.

Given the above, the conclusion is that the theories and schools of strategic management can be divided into prescriptive and descriptive schools. A detailed analysis of the strategic approach and theory are presented in the work by Mintzberg et al. (1998) who reported basic directions and schools of strategic management which had different views on the formulation of firm strategy, each from its own unique perspective. Thus defined schools according to these relevant authors represent different stages in the development of strategic management, some of which have already reached their peak, while others are still developing. It was emphasized that those schools could be grouped into categories.

First group consisted of schools that were prescriptive in nature, and served as the basis for the development of two other schools. These are the following (Tipurić, 2014):

- **The design school** - in which forming of the strategy is seen as a process of imagining i.e. informal design (concept);
- **The planning school** - in which forming of the strategy is the formal process of systematic planning and
- **The positioning school** - which perceives the forming of a strategy as an analytical process that is less focused on the process of creation, and more on the questions of strategy content. It was named such because in the focus of this school there is a selection of strategic positions of firm.

In the second group includes six descriptive schools of strategic management that consider specific aspects of creating strategies. These are the following (Tipurić, 2014):

**The entrepreneurial school** - where strategies are formed in the visioning process that characterizes great leaders,

- **The cognitive school** - emphasizes mental processes when forming strategies and the role of cognition in the creation of strategic patterns,
- **The learning school** - where strategy is formed in the process of emergence: a kind of adaptive process of gradual organizational adjustments, outside the complete control of top managers,

- **The power school** - unlike the previous school, it stresses the collective processes and cooperative dimension in forming of strategies,
- **The environmental school** - focuses on reactive processes as a sources of strategic creation, i.e. the fact that the initiative strategic action does not lie within the firm but rather in the external context that surrounds it,
- **The configuration school** - according to which strategies are formed in the process of transformation. According to the authors, this school has aspirations to become integrative school and actually represents the area called in literature as "strategic change".

Analyses of different approaches towards the strategy refer to the need of defining the boundaries and the distinction between theoretical approaches. Each strategic process must take into account various aspects of the developed theoretical models. It is important to stress that each model is not applicable in all situations, but it must be adapted to the particular situation, environment, time, etc.

Several researchers pertaining to this school (Barney, 1991; Jenkins et al., 2007; Foss and Mahnke, 2000), state the basic issues arising in the context of strategic management, such as the following: why do firms exist? Why certain firms succeed? Why do firms differ? What determines the limits of a firm? With whom and how firms compete? How firms maintain a competitive advantage over time, i.e. why some firms are better than others? What firms do and how they do it? What is the role of a central organizational unit in a complex diversified firm? What are the determinants of success or failure of firms in international competition?

All answers to questions raised and possible related discussions (in terms of strategy implementation possibilities, defining the number of the phases, rationality in strategic thinking, etc.) contributed to the development of approach with a focus on the rationality of processes, or the opposite, with a focus on visionary approach as a complete contrast. These two approaches are actually inversely proportional and in complete contrast. Rational approach is characterized by emphasizing technical rationality, process control and logic as the fundamental forces, while the lack of innovation and inspiration is considered to be a huge limitation. Visionary approach gives emphasis to extremely strong organizational values and long-term view of business, but has a reoccurring problem with the definition of the details necessary for successful implementation.

Rational approach to strategic management primarily focuses on the content of the strategic plan, instead of orientation on the analysis and display of processes necessary for the plan realization. Such approach to the planning of a future is based primarily on an analysis of the past, in order to recognize and understand the present. Therefore it is logical that such approach to strategic management puts greater emphasis on the projection of short-term goals rather than on trying to understand and prepare the organization for attaining long-term goals and accomplishments.

In contrast, visionary approach to strategic management is focused more on the process. Visionary approach attempts to develop organizational view of the future that all employees accept and act in accordance with it through the inclusion of various organizational levels and employees in the process of strategic thinking. When there is a vision that is common and accepted by the entire organization it is considered that the implementation of such a strategy will be efficient and effective.

Each above explained approaches and directions have their own peculiarities and characteristics, but of critical importance is to understand the problem of strategic management and its processes in many ways and from different angles, in order to recognize the advantages and disadvantages of each approach to be able to choose one approach or a combination of them, which would help in realization of business plans and objectives in particular market situation.

In a nutshell, the strategic management as a concept developed over time and additionally spawned a number of different approaches. Changes in field are frequent, there is no single paradigm, and theoretical discourses are numerous, with greater or lesser degree of consistency. Incompleteness is the mark of each current manner of theorizing and eclecticism describes the current state of the discipline. This implies that the strategy is new, challenging and under-explored. All categories, structures and models developed within the discipline are incomplete offering plenty of space for creative, inspired and imaginative researchers (Tipurić, 2014).

### **3. OVERVIEW AND THE PERSENT RESEARCHES OF COMPETITIVE DYNAMICS**

Schumpeter in his theory of "*creative destruction*" (1942) emphasized the importance of the competitive dynamics. He described this process as a "*perennial gale*", triggered by the above-average profits realized through the competitive behavior of the firm which took the first move compared to its competitors. Retained profits generated by the industry leaders encouraged competitors to take a move or a response with the aim of attempting to dethrone the leaders and overtake their position. Schumpeter argued that the result of "*creative destruction*" process is that no one is spared from being attacked in the market competition, and for a good understanding of the competition it is necessary to analyze in detail the interaction and effects of competitive behavior (Barišić, 2015).

In such a dynamic context, moves and responses taken by firms in the market in search for new opportunities is actually what determines modes of long-term survival and mutual coexistence of competitors. In the wake of Schumpeter theory a conclusion was drawn that firms which act quickly and proactively on the market in a given period obtain extremely high profits thanks to the delayed response of its competitors (Nelson and Winter, 1982).

Porter (1980) stresses the competition as the central subject of research in the field of organization and strategy. The focal part of competitive dynamics research is as competition and relations between firms competing on a certain market (or more). Therefore the rapid development and popularization of the direction of the competitive dynamics is not surprising and could be explained on the basis of a number of important arguments. Research of competitive dynamics can provide valuable data and discoveries explaining the behavior of concrete firms in the market competing with their direct competitors. Competitive dynamics studies the concrete and measurable competitive moves and as such gives the cumulative results. It also examines the interaction among its competitors, focusing not only on competitive moves taken by one subject, but also examines responses (or countermoves) of other competitors. Finally, the scope of competitive dynamics shows the potential to create closer links with other areas of strategy and organization as the main benefit (Chen and Miller, 2012).

Since competition occurs whenever two or more parties seek something that cannot belong to everybody (Stigler, 1957), it is clear that market development causes building up of competitive tensions, but also and the interdependence of firms that are competing in certain niche markets. Researchers in the field of competitive dynamics consequently try to empirically demonstrate the impact of competitive moves that resulted with benefits due to delayed or untimely response of competitors (Chen, 1988; Smith et al., 1991). Schumpeter's theory nicely shows "head to

head" rivalry between the firms, in which competitors compete constantly in order to stay ahead of their opponents. The market leaders are under constant pressure from new and unforeseen challenges of competitors who are aggressively imposing themselves in order to reach a better position in the market. Therefore they must actively seek new business opportunities, channels, services, products, etc., in order to protect their reputation and leading position (Kirzner, 1973).

Beside the stated basic main components of the model, we can emphasize that competitive dynamics is also characterized by a number of other "research approaches and topics" which are dealt by the researchers in this area. Several more prominent ones are given below.

**Competitive interaction** – researches done at the level of competitive moves (action level studies). In this approach, studies emphasize the individual competitive moves and drivers competing responses as the central unit of analysis. The strategy itself is conceptualized as a series of competitive moves, and their competitive series make-up the repertoire, i.e. wider (or narrower) range of competitive moves.

Focus on the specific individual competitive move has implications also on the theoretical level, given the fact that in previous organization and business strategy researches were not embraced so narrow and specific level of competitive behavior. Previous analysis of the competition was aimed at wider scope of interest at the level of strategic groups, industries, etc. On the other hand, through "micro approach" competitive dynamics reveal finely profiled and specific links in the interaction among competitors. A valuable contribution of competitive dynamics research with an emphasis on individual competitive moves reflected in the fact that it shows the core of each individual activity that makes a competitive interaction. The limitation of this approach is that individual context sometimes ignores that individual decisions are often actually a part of a strategy or strategic repertoire and drivers which stand behind these decisions, as well as answers to them, must inevitably reflect the business policy of the firm.

**Research at a firm level** - this research topic in the area of competitive dynamics focuses on the research at a firm level, although it still uses individual competitive move as the basic factor of competition. Research in this area of competitive dynamics strive to identify organizational and contextual antecedents that drive competitive behavior and competitive repertoire, while the achieved business performance is observed as a result of competitive dynamics. Data at the level of a firm used in this type of research were created on the basis of tests of various competitive moves firms take to compete with its competitors.

The goal is to understand the behavior of the firm with the help of a systematic analysis of the characteristics that explain a series of competitive moves and responses. Such analysis focuses on characteristics of behavior of individual firms such as e.g. propensity for action, responsiveness, speed of execution and visibility of taken competitive moves. Thus we come to the conclusion that one of the basic premises in the competitive dynamics research is that the competitive profile of the firm is reflected by the competitive moves and responds which firm undertakes in the specific market context when compared to their competitors.

**Competitive repertoire** - Some of the authors defined the competitive strategy as a repertoire of micro-competitive behavior (Ferrier, 2001; Ferrier and Lyon, 2004; Miller and Chen, 1994, 1996). Competitive repertoire is made up of a whole series of competitive moves firms take (e.g., new products, pricing initiatives, new services, etc.). Such a repertoire is view harmonized with long-term observation of the strategy as a pattern of behavior presented through a series of decisions (Mintzberg, 1978).

Certain important features of a firm that were previously ignored were identified and isolated in the process of competitive repertoire study. Thus concepts such as competitive inertia were singled out (Miller and Chen, 1994), together with simplicity or diversity in the types of taken competitive moves (Ferrier and Lyon, 2004; Ferrier, 2001), their non-compliance or departure from certain industry standards (Miller and Chen, 1996).

Important feature of competitive repertoire is the competitive simplicity, which indicates the tendency of firms to focus only on several major competitors' activities, where the consideration of various competitive behaviors is ignored (Miller and Chen, 1996). If the firm decides to take a narrow range of competitive moves, it can feel the negative consequences of their limited competition repertoire. The reasons that encourage this approach to competitive bidding may be varied: good previous operating results, satisfaction with the actual situation (often paired with the size and age of the firm), lack of fresh ideas, proactivity and the like. (Miller and Chen, 1996).

Another important feature of the competition repertoire is a repertoire deviation from industry standards (repertoire non-conformity), which refers to firms tendency to deviate the competitive repertory and from established norms of competitive behavior in a particular industry, which means undertaking whole set of competitive moves atypical for a particular industry. Repertoire deviation is composed of different types of competitive moves that competitors rarely used or are different from the types of competitive moves that are commonly used in a particular competitive environment (Miller and Chen, 1995). Inertia or sluggishness in competitive repertoire refers to the level of activity which firm shows when changing its competitive behavior in terms of number of market-oriented moves taken in an attempt to attract customers and outsmart competitors.

By using the "repertoire approach" in their research, authors reached new insights into key constructs of competitiveness, by integration of the market variables (e.g, diversity and growth) with those at the firm level (e.g. size and age) that helped to explain the causes of simplicity of the repertoire, inertness and non-compliance. By series of studies, it was found that the stated constructs had implications on the performance achieved in the business. For instance, Miller and Chen (1994) found by analyzing the competitive inertia that unfavorable results of previous business enterprises can encourage taking tactical moves, but on the other hand inertia discourages moves at the strategic level requiring serious changes at the level of decision-making and is more difficult to implement.

**Conceptual links** - this topic is very important in the research of competitive dynamics since the literature which deals with the competitive interaction, competitive behavior and competitive repertoires is very complementary and interrelated. Conceptual links try to present approach at the level of individual "micro-moves", as well as the more complex part that includes a combinations or repertoires of competitive activities. The original, narrower approach was closer to the behavioral analysis of researchers prone to use of psychological analysis. The second, broader approach was studied by scientists who were more prone of using economic and sociological analysis. Competitive dynamics intends to merge these two approaches by creating common links and synergy benefits. Studies used to analyze and give the importance of the concept of path dependence are a good example of linked studies on the level of competitive moves and the strategic repertoire domain.



Regarding the behavior and characteristics of firms in the previous period, e.g. structure (Smith et al., 1991), characteristics of top management (Ferrier and Lyon, 2004; Hambrick et al., 1996), firm size (Chen and Hambrick, 1995), inertia (Miller and Chen, 1994), simplicity of repertoire (Ferrier and Lyon, 2004; Miller and Chen, 1996), non-conformity (Miller and Chen, 1996) and aggressiveness (Ferrier, 2001; Ferrier and Lee, 2002) their impact can be expected on the future behavior of firms. Every strategic move undertaken by the firm is limited and shaped by its previous actions hence the firm can create its future moves accordingly.

Investments and activities in the past periods can determine and shape the behavior of the firm and its strategic options in the future, and also consequently design its ability and efficiency in creating of added value. An important research implication of the competitive dynamics is that historical behavior of a particular firm or industry, paves the way for the future competitive activities of the firm and shape the final outcomes.

**Competition across multiple markets** - Some competitors compete in multiple markets through related resources such as technology, skills and competences. Thus firms can compete in multiple markets within the same industry or compete directly in a particular market segment. The consequence of such behavior among firms is to compete in different markets with different competitors (multiple-point competition) or the same firms can compete with each other simultaneously in several different markets (multimarket competition). There is a growing interest for research of this field which first spotted by Edwards (1955) by study of mutual tolerance among competitors (Mutual forbearance). Tolerance represented an idea that firms operating in the same markets recognize the interdependence and as a result of adapting their competitive moves, in order to minimize risks and avoid possible escalation and retaliation to competitors. Baum and Korn (1996) found that close competitors avoid engaging in a very intense rivalry, moreover, firms that compete with each other in several markets are less aggressive against each other than those that compete in one or possibly two markets.

Gimeno and Woo (1996, 1999) shown there is a positive relationship between the overlapping multiple markets and pricing i.e. cost margins of competitors, assuming that the increase in contacts on multiple markets results in decline of rivalry, while on the other hand strategic similarity among firms and comparability in their competitive strategies, encourages the strengthening of mutual rivalry. It was also found that competition in several markets encouraged reduction of the level of rivalry and leads to increased profitability. This positive relationship further strengthens when the interrelationships in the markets where it is possible to share resources. Rivalry among multinational firms is an important factor of competitive dynamics research which expanded also to the international business relations.

#### **4. COMPETITIVE DYNAMICS CRITICISM**

Research in the field of competitive dynamics was conducted in a relatively short period of 30 years, but analysis and conclusions in this period provided many useful insights and scientific contributions to the field of strategic management. Competitive dynamics field is not a stagnant one, but is constantly developing and evolving with every new research and contribution. Research within the competitive dynamics provided insight into the connection of competitive moves and responses and features that characterize it (speed, intensity, complexity, level of aggression etc.), mostly in relation to the achievement of business results. Research within the field of competitive dynamics reveals many conclusions about the links between the characteristics of internal and external factors that also affect the competitive behavior.

Despite large achievement in the area of disclosure of assumptions, characteristics and effects of competitive interactions and the fact that a large part of the findings undoubtedly confirmed various interesting interconnections, competitive dynamics as a method is subject to certain criticism based on its shortcomings, but it also offers certain suggestions for overcoming the identified shortcomings.

In the initial research of competitive dynamics tight sample was criticized which did not allow sufficient extent of statistical data processing and drawing of conclusions. Although, eventually use of the method of structured content analysis samples became wider and researches were conducted on a larger sample of firms in many industries, many authors agreed that even those samples were still not sufficient and relatively small given the complexity of modern industrial developments. It is also considered that research is too limited for local firms coming from particular markets.

The fact remains that a large number of previous studies in the field of competitive dynamics, published in the most prominent management journal where conducted on the sample of selected US industries. On the one hand, such choice is clear, considering that the competitive dynamics has certain idiosyncratic features that make it suitable for research, on the other hand focusing merely on certain industries within a single market gradually leads to generalization of research directions while it is necessary to include other industries in the research of this area (Tipurić, 2014). Problem solution could be inclusion of global, multinational players in the pattern of the research.

When it comes to methodology, it can be stated that the competitive dynamics greatly contributed to the definition and expression of the competitive behavior of firms through structured analysis of collected content from various media sources. Such, very demanding research gives fairly consistent and good results, but is depend on media coverage of individual industries and firms, and it is possible that certain features of competitive matches were ignored because of lack of media interest in specific topics, causing problems for researchers in view of missing data in the databases which could result in missing fragments in particular studies. The suggestion is to make new ways of collecting data for the research, directly from top managers, which are responsible for the implementation of competitive moves, essential for further analysis. Here there is a re-occurring problem of objectivity and precision in answering individual respondent and ultimate comparability of data collected from management representatives of various firms. But it is considered that depth interviews are nonetheless very reliable sources of information for the purpose of further empirical analysis.

Previous studies mainly analyzed the direct and linear connection between cause and effect of competitive moves (Smith et al., 1991), while in addition to these direct linear relationship it is suggested for future research, to include the wider context of all those indirect links which discover relationships between different characteristics and specificities that affect the competitive activity and competition outcomes.

## **5. CONCLUSION**

Research study of competitive dynamics has emerged as a growing stream of work. Therefore in last 30 years, competitive dynamics has originated in the field of strategic management abroad. Competitive dynamics focuses on the characteristics of attacks and counterattacks in the interaction among competitors. On the basis of the existing research of competitive dynamics, in this paper we tried to explain its antecedents and defining features, to identify the major research themes and most valuable authors. We also summarized the theoretical

background of methods of research of competitive dynamics and analysed the limitations and future research directions.

After initial researches performed in the 1980s, competitive dynamics researchers have advanced in many concepts and models, and it evolved even more by implementing some important frameworks in the research model like awareness-motivation-capability framework (AMC) framework (Chen, 1996) which emphasized the importance of internal processes in firms as drivers for taking competitive moves which shaped their characteristics. Also, researches included movement from dyadic studies of individual competitive moves to repertoire approach of more richly characterized competitive moves among sets of players (Chen and Miller 2012). This all lead to the development of the method which still has some limitations and gaps, especially in the lack of integration and problems with data collecting.

Albeit the number of limitations and deficiencies in the competitive dynamics research, this area still remains growing new field. Researchers agree that this area has great potential for future work and interesting new scientific achievements.

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## DIVERSIFICATION EFFECT ON PRODUCTIVITY: A CAUSALITY ANALYSIS

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### **ABSTRACT**

*Traditional international trade theory expresses that due to comparative advantages, the countries and firms obtain considerable advantages with product specialization. In contrast to this view, however, there is an approach suggesting that product diversification (instead of specialization) in trade makes the countries and firms more resistant against economic shocks and thus, they became more productive compared to specialized economies. In this study, the relationship between product diversification in export and productivity will be analyzed by causality test. In the model, the annual data will be utilized between the years of 1970 and 2010. Dependent variable is the rate of total productivity, while independent variables are diversification index and gross domestic product (GDP). The result indicates that there is a positive directional relationship between productivity and export diversification.*

**Keywords:** *Causality Analysis, VECM, Diversification, Productivity*

### **1. INTRODUCTION**

Standard international trade theory implies that specialization in a product creates important opportunities to firms and countries due to comparative advantages. With specialization, the allocation of the resources becomes more efficient and productive. In contrast to this view, some economists argue that diversified economies are less vulnerable to economic shocks and more productive than specialized economies. In literature, the results about the relationship between diversification and productivity vary according to the methods used and the sectors and countries selected. Therefore, it is possible to find positive, negative and even no significance relationship between variables. According to some of these arguments, when the distribution of product diversifies, GDP per capita and productivity will also increase. So, the study aims to compare the effect of diversification on productivity according to these different views for selected countries. In an economy, product diversification is evaluated by means of indices. According to this, the most important indicator expressing product diversification is export diversification index. As the value of this index approaches to zero, product diversification increases, while it approaches to one, the rate of concentrating on products increases. This index is 0.196 for the developing countries in 2013; 0.188 for the developed countries; 0.479 for Turkey; 0.347 for Germany; and 0.381 for Italy. Hence, it seems that Turkey becomes specialized on certain products, rather than product diversification, while the other countries go towards product diversification compared to Turkey.

Due to the reasons mentioned above, the dynamic relationship between diversification and productivity has been analyzed in this study. The models have been estimated using yearly data from 1970 to 2010 for selected countries (Germany, Italy and Turkey). Labor productivity has been considered as productivity indicator. The independent variables are export diversification index and gross domestic product (GDP). By using the variables above, relationship between the series has been analyzed with Johansen Cointegration test and Vector Error Correction Model.

## **2. EXPORT PRODUCT DIVERSIFICATION, GROWTH AND PRODUCTIVITY**

There are considerable amount of theoretical and empirical studies regarding the strong relationship between foreign trade structure and size; economic growth and development of a country; and the effect of trade on the performance of economy in various ways. Grossman and Helpman (1991), Rivera Batiz and Romer (1991) suggested that there is a relationship between development and trade resulting from the investment. Other channels also are described as follows; economies of scale, increase in capacity utilization and ways of effective gaining created by competitive pressure in world trade (Bağcı, 2010, p.2).

There are different arguments about the effects of product diversity and specialization on growth and productivity. The standard international trade theory states that specialization has a bigger effect on growth and productivity due to comparative advantages. Smith (1776) and Ricardo (1817) explains that specialization has a significant role in total productivity and effectiveness. In this approach, export will trigger economic growth along with specialization in sectors. Therefore, towards relatively less active sectors resources will be redistributed and productivity of these sectors will increase. On the other hand, Bernard et al. (2007) states that product diversity is more effective on growth and productivity. Accordingly, product diversity provides many advantages like economies of scale and scope, low costs, production structure compatible with market changes, positive growth caused by innovation and learning process (Chari, Devaraj and David, 2007, p.184). In his study on transition economies, Shepotylo (2012) concluded that in cases product diversity is insufficient, foreign trade is more fragile. At this stage, he states that it is necessary to increase the diversity with supportive economic policies. Singer (1950) explained that an increase in product diversity in a period has a positive effect on growth in the following period. In his studies on various countries, Al-Marhubi (2000) concluded that diversity triggers growth. Similarly, in his panel data study in Latin America countries, Pineros (2000) indicated that there is a positive relationship between diversity and income per capita. In their studies for Chile, Herzer and Lehnmann (2007) found that diversity is significant for economic growth. However, for these increases to occur, it is necessary to take policy measures like macroeconomic stabilization, removal of entry barriers, increasing investments in infrastructure and human capital (IMF Policy Paper, 2014, p.36). According to Imbs and Wacziarg (2003), the sectoral concentration path between export product diversity and economic development is u-shaped. Countries primarily focus on diversity and they prefer specialization when the income level goes down to 9000 \$. Therefore, according to the results of the study, specialization may play a preventive role in income complaints in low income countries. Low growth in countries in Africa, Latin America and Gulf that are based on export of specific products like petrol, natural gas, banana and cocoa may be an example for this study (Değer, 2010 p.261).

Although studies on the relationship between product diversity and productivity are rare, as a result of empirical studies, studies which prove positive relationship between product diversity and productivity are a lot. In their studies in agricultural sector, Jat et al. (2011) concluded that product diversity increases the effectiveness in high productivity and use of resources. Bağcı (2010) points out that specialization and diversity is effective on productivity in different ways. He was unable to find a meaningful relationship between export structure and productivity in his study that he made GMM analysis for high, medium and low income countries. Acemoğlu and Ziliboti (2001), Parente and Prescott (2000) concluded that effective and productive diversity has a positive effect on total productivity. Product diversity also has a positive effect on the profitability of the companies via increase in productivity. Wagner (2014) concluded that product diversity in production sector has a positive effect on the profitability of product diversity in his study on Germany.

The relationship between product diversity in export and economic policies is generally works as follow (IMF Policy Paper, 2014, p.33):

- Effectiveness and productivity in education and organizational structure in developing countries increases the product diversity.
- Deeper financial system has a positive effect on product diversity in export in developing countries.
- Globalization increases product diversity in developed, developing and underdeveloped countries.
- For the increase in productivity, close markets are significant. For instance, product diversity in landlocked countries is lower.
- Free trade and agricultural reforms has a significant role in the first stage of development processes of countries.
- Undervaluation in real exchange rates effects the profitability of companies and causes increase in product diversity.

### 3. DATA AND METHODOLOGY

As regards to the data employed in this study, the annual data is collected for the period 1970-2010 for the Germany, Italy and Turkey. The variables used in this study covers real gross domestic product (GDP) in billions of constant 2005 US \$, Diversification index (DI) and Productivity (P). The data of real GDP (Y) is sourced from World Development Indicators 2015 (World Bank), Diversification index data is sourced from IMF and Productivity data is sourced from The Conference Board. All variables are in natural logarithms.

The Model is written as follows:

$$\ln DI_t = \beta_0 + \beta_1 \ln P + \beta_2 \ln Y + \varepsilon \quad (1)$$

where:

P: Labor Productivity

Y: Reel Gross Domestic Product

DI: Diversification Index

Analysis will be estimated using vector error correction model. By VECM, besides estimation of short and long term flexibility, determining coefficient of deviation from stability between variables and fixing these deviations are also possible (Enders, 2003, pp. 365-366). Moreover, VECM analysis may eliminate the problem of spurious regression that may occur between dependent and explanatory variables. According to this, VECM model is as follows (Sevüktekin, 2010, pp. 523-524):

$$\Delta Y_{1t} = \alpha_0 + \sum_{j=1}^k \alpha_{1j} \Delta Y_{1t-j} + \sum_{j=1}^k \alpha_{2j} \Delta Y_{2t-j} + \lambda_1 ECT_{t-1} + \varepsilon_{1t} \quad (2)$$

$$\Delta Y_{2t} = \beta_0 + \sum_{j=1}^k \beta_{1j} \Delta Y_{1t-j} + \sum_{j=1}^k \beta_{2j} \Delta Y_{2t-j} + \lambda_2 ECT_{t-1} + \varepsilon_{2t} \quad (3)$$

In the model,  $ECT_{t-1}$  refers to error correction term and  $\lambda_1$  and  $\lambda_2$  refers to correction coefficients. Statistical meaningfulness of error correction coefficient ( $\lambda$ ) shows deviation from long term stability. And size of coefficient shows the approximation to long term stability (Gujarati, 2004:729). According to that the model is written as follows:

$$D(\ln p) = \beta_0 + \sum_{i=1}^n \beta_{1i} d(\ln Y) + \sum_{i=1}^n \beta_{2i} d(\ln d) + \lambda EC_{t-1} + \varepsilon_i \quad (4)$$

Engle and Granger (1987) stated that there should be cointegration between variables for the application of error correction model. Existence of cointegration relationship between variables will be analyzed using Johansen Cointegration. Before VECM, it should be tested if the variables in the model are stable or not. Stability test is done using unit root test. Each variable in the model is analyzed using Augmented Dickey-Fuller (ADF) unit root test. As a result of unit root test, all variables are expected to be first-degree I (1) stable. If sequences are first-degree I (1) stable, cointegration test will be done. The unit root test involves testing the coefficient of the least square estimate  $\beta_1$  in  $\Delta y_t = \alpha_0 + \alpha_1 t + \beta_1 y_{t-1} + \sum_{i=1}^n \beta_i y_{t-i}$  is equal to unity (Baffoe, 1998, p. 185).

#### 4. EMPIRICAL RESULTS

In this paper, firstly ADF unit root test is used to investigate the stationary properties of variables. After that, in order to determine the relationship between variables is analyzed with Johansen Cointegration test and vector error correction model.

##### 4.1. Unit Root Test

Features of the variables in the model need to be checked to determine the suitability of modeling to be estimated. First, it needs to be determined if the variables are difference static or level static. This test applied with the help of Null hypothesis shows if the variables in the model contain unit root or not (Baffoe, 1998, p.185). According to this, to examine the stability of the series, Augmented Dickey-Fuller Unit Root Test was done. Test results are shown in Table 1.

Table 1: The Result of ADF Unit Root Test

Countries/ Variables		DI		PRO		GDP	
		Constant	Constant&Trend	Constant	Constant&Trend	Constant	Constant&Trend
Turkey	Level	-1.776	-2.083	-1.083	-3.732	-1.796	-2.262
Italy		-1.079	-2.893	-1.041	0.999	-1.714	-0.955
Germany		-0.518	-2.215	-2.551	-0.941	-1.027	-2.272
Greece		-1.117	-2.734	-1.898	-1.946	-1.709	-2.866
Turkey	First	-4.829	-4.846	-7.557	-7.538	-5.970	-6.208
Italy		-6.766	-6.719	-4.430	-5.123	-2.741	-5.068
Germany		-5.594	-5.536	-3.493	-4.673	-2.872	-4.148
Greece		-7.455	-4.522	-3.224	-3.253	-3.688	-4.703

Notes. With constant and trend critical values are: -4.20 (1%), -3.52 (5%), -3.19 (10%); with constant critical values are: -3.61 (1%), -2.92 (5%), -2.60 (10%).

According to the results, variables for all countries are first level static. Therefore, after this stage, cointegration can be tested.

##### 4.2. Johansen Cointegration Test

Existence of cointegration relationship points the existence of long term relationship between variables. To confirm the cointegration relationship in the study, Johansen Cointegration analysis was done.

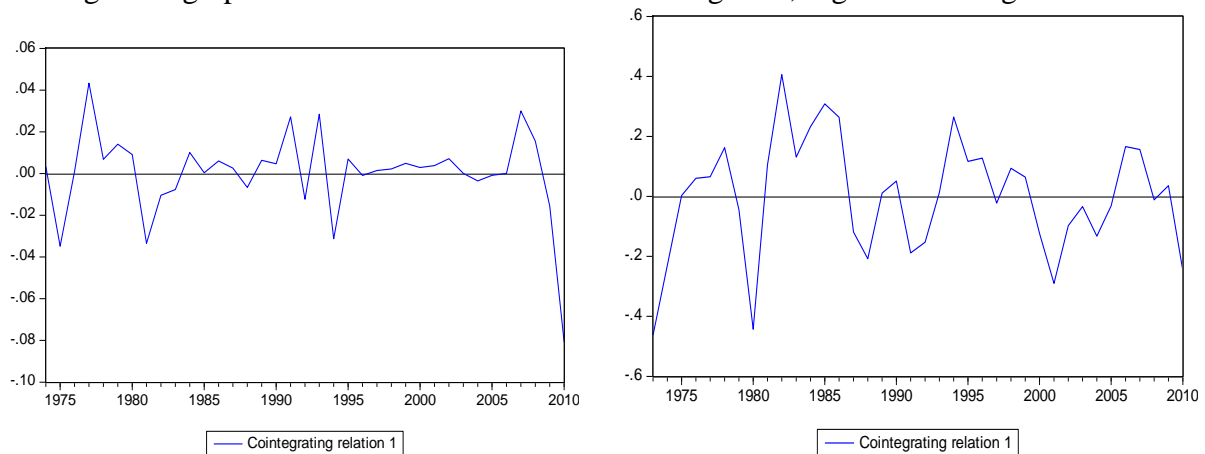


Table 2: Results of Johansen Cointegration Test for Countries

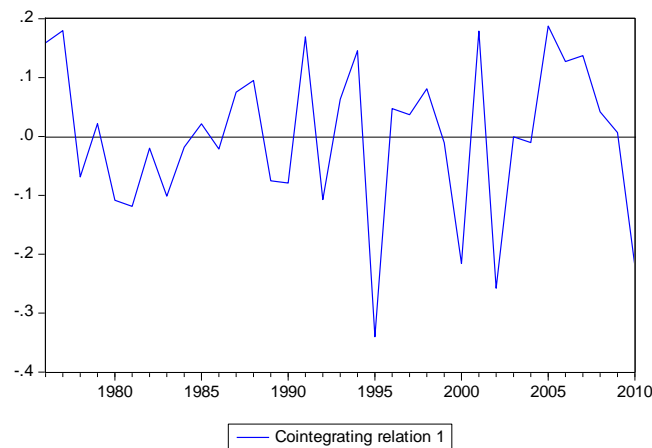
Countries	Hypothesized No. Of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.
Germany	$r=0$	0.526683	43.41077	42.91525	0.0446
	$r \leq 1$	0.218394	15.73516	25.87211	0.5139
	$r \leq 2$	0.163786	6.618206	12.51798	0.3860
Italy	$r=0$	0.431429	34.04828	29.79707	0.0153
	$r \leq 1$	0.261842	13.15704	15.49471	0.1092
	$r \leq 2$	0.050670	1.923942	3.841466	0.1654
Turkey	$r=0$	0.404939	40.69303	29.79707	0.0019
	$r \leq 1$	0.331739	21.48665	15.49471	0.0055
	$r \leq 2$	0.162760	6.572845	3.841466	0.0104

According to the results, it is found that there is Cointegration between variables for all countries.

Cointegration graphics for all countries are shown in Figure 1, Figure 2 and Figure 3.



Figure/Chart 1: Cointegrating relation for Germany Figure/Chart 2: Cointegrating relation for Italy



Figure/Chart 3: Cointegrating relation for Turkey

### 4.3. Vector Error Correction Model

According to Engle and Granger (1987), when there is cointegration that shows the long relationship between variables, it is possible to define Vector Error Correction Model. It is also possible to examine short-term causal relationship by Error Correction Model constituted between variables that have cointegration relationship. That is because short-term dynamics of the variables in the system are affected by the deviations from stability. Variables fix these deviations at the rate of the adaptation parameters reflected by the coefficient of the error correction term in short-term.

#### 4.3.1. Germany

As a result of the model for Germany, variables are defined as stable and existence of cointegration is revealed. Therefore, VECM analysis can be done. According to that, the estimation results for Germany are plotted in Table 3.

Table 3: *VECM Results for Germany*

InP	InDI	InY
1.000000	0.719003 (0.22148) [3.24643]	0.561703 (0.19659) [2.85723]
InP=0.719InDI+0.561InY		
EC <sub>t-1</sub> : -0.620 [-3.456]		

For VECM to be valid, EC should be ( $0 < EC < -1$ ) and meaningful. As a result of the analysis, error correction term is defined as -0,620 and meaningful. According to this, a deviation of 1 unit will be fixed at a rate of 6% in the following period. According to the normalized values, an increase in diversity index by 1% causes an increase in productivity by 0,71%, and an increase in GDP by 1% causes an increase by 0.56%.

#### 4.3.2. Italy

The estimation results for Italy are plotted in Table 4.

Table 4: *VECM Results for Italy*

InP	InDI	InY
1.000000	13.480 (6.67006) [ 2.02110]	0.869932 (0.32245) [ 2.69785]
InP=13.480InDI+0.869InY		
EC <sub>t-1</sub> : -0.030 [-4.845]		

Since the error correction term (-0.030) is meaningful, error correction mechanism is valid, and instability in a period may be fixed in the following period. According to this, about 0.03% of a deviation from a 1-unit stability can be fixed. When normalized values are examined, an increase in diversity index by 1% causes an increase in productivity by 13,48%, and an increase in GDP by 1% causes an increase by 0.869%.

#### 4.3.3. Turkey

The estimation results for Turkey are plotted in Table 5.

Table 5: *VECM Results for Turkey*

InP	InDI	InY
1.000000	0.257194 (0.07056) [ 2.954367]	0.722075 (0.082554) [8.746685]
InED=0.247InLP+0.722InY		
EC <sub>t-1</sub> : -0.470 [-4.033]		

Error correction for Turkey is -0.470 and meaningful. According to this, about 47% of a deviation from a 1-unit stability can be fixed.

When the results of the analysis are evaluated, it is seen that an increase in diversity index by 1% causes an increase in productivity by 0.257%, and an increase in GDP by 1% causes an increase by 0.722%.

#### 5. CONCLUSION

This paper investigates the relationship between export diversification index and productivity for 1970-2010 in Germany, Italy and Turkey. In order to this the stationary properties of variables are examined by ADF unit root tests. According to result all variables for countries are first stationary. After unit root test The Cointegration between variables is investigated with Johansen Cointegration Test in order to determine long-run coefficients of variables. Finally, the VECM Granger causality test is utilized to specify the direction of causality. The empirical results show that export diversification index and productivity are positively correlated with each other in all countries.

When the results of empirical studies are evaluated, export product diversity statistically meaningful effect on the increase of productivity in all countries. Therefore, when sectoral factors are taken into account, and economic regulations such as macroeconomic stability, removal of entry barriers in international trade, increasing investments in infrastructure and human capital are actively performed, export product diversity may have a positive effect on productivity.

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## OIL INCOME, LIBERALIZATION AND STATE INTERVENTION: THE CASE OF ALGERIA

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### **ABSTRACT**

*Like other oil-producing Arab countries, Algeria has followed a specific line of development: that of the rentier State. Its economy has been characterized by dependence on oil income which account for 98 % of all export earnings. Income from the production of gas and oil make up 40% of GDP and two-thirds of its budget income. The sharp rise in oil prices from 30 dollars in 2002 to 147 in 2008, has allowed Algeria to acquire foreign exchange reserves estimated at over \$ 200 billion. Oil income was forever the key element of the famous tacit agreement that the authority has with the company, the contract was to ensure social peace and maintaining the hegemony of the state over society. This income has served to maintain a consensus around the government's power.*

*Algeria has been involved for over twenty years in a process that should lead to the passing of an economic system administratively directed to a market system. Single in its kind, the transition of former centrally planned economies to market economy is faltering. We noticed that the discourse on the transition grows with each fall of hydrocarbon prices. This leads us to say that there is a clear relationship between oil revenues and state intervention in the economy. In other words, the transition to a market economy is driven by the decline in oil revenues. If the financial resources of the state decrease its intervention also reduced.*

*Therefore, economic liberalization depends on the financial resources of the state. This is the purpose of our communication.*

**Keywords:** *Developpement, liberalization, market, Oil income, State*

### **1. INTRODUCTION**

Natural resources, mainly oil, have been and continue to be a major role in the Algerian economy, in the sense that the revenue generated by the exploitation of these resources constitutes the bulk of the country's export revenues. Also, the kind of management and allocation of these resources is a key factor in the evolution of the Algerian economy.

Encouraged by oil revenues, the Algerian state reacts to economic and social problems through greater intervention in the economic and social field. The state replaces vainly to market it rejects outright.

The decline in oil revenue challenges the entrepreneur State. The financial difficulties of the late 80s due to the oil price fall that forced Algeria to negotiate with the IMF and to adopt a structural adjustment program is a simple indicator of deeper dysfunctions of the Algerian economy. The interventionist state in the sixties is transformed into a passive rentier state. The state withdrew in favor of economic reform. This movement between a centralized state and a state that liberalizes is renewed every fluctuation of oil prices. We believe that the relationship of the state in the economy is related to the volume of oil revenues. Such is the objective of this work.

## 2. SOCIALISM WITHOUT PLANNING

Even before independence, the problem of hydrocarbons was certainly in mind future Algerian leaders. The oil sector, which represented in 1962, 45% of Algerian exports is integrated into the government plan. Except that this sector is owned by foreign companies. Not having the ability to directly exploit this resource, the Algerian State opts for self-management of enterprises abandoned by the French settlers.

Workers in a wide spontaneity of movement have taken over the former owners giving rise to the first socialist experiment. Thus was born the self management that will be legalized later. This first experience reflecting a popular voluntarism will be supervised by the authorities who will find the experience of the Yugoslav system, a source of doctrinal inspiration. However, the popular movement that sees the self-recovery by the people of the national wealth is facing a state still disorganized and without financial resources. Self-management means for the workers, the collective appropriation of abandoned businesses and of course, the surplus they could generate. Conversely, political power legitimized by the national liberation war saw this system was being set up spontaneously, as a social movement that is developing independently from the state. The first texts that will regulate self-management aimed at weakening this autonomy by reducing the property rights that allows them to capture the generated surplus.

## 3. ABUNDANCE OF OIL REVENUES: THE STATE CENTRAL COORDINATOR

A few years after independence, and following the failure of self-management, state economic choices were refined and radicalized. The development became state, and centrally planned. If so was beginning a long nationalization of the sources of wealth process. February 24, 1971, the Algerian government announced the decision to nationalize hydrocarbons and assign the State control of French companies producing crude oil. Indeed, in the space of a few years, state control has become widespread in all sectors; Industry to agriculture through the circuits of internal and external trade. Companies, banks, insurance companies have all been under ministerial supervision. It was a massive transfer of wealth from civil society to the state.

Encouraged by major oil revenues following the nationalization of hydrocarbons, the state has built its strategy on public investment extended to all sectors. Also under development by centralization, it is the State itself which is responsible for defining the variable adjustment of flow and ebb of wealth: the price, the interest rate, the rate currency, wages are defined a priori by the planning body.

**Table 1. La part des ressources fiscales en (%).**

	1963/1 966	1967/1 969	1970/1 973	1974/1 977	1978/1 979
<b>Fisca lité ordinaire</b>	66,0	60,0	58,0	32,6	34,3
<b>Fisca lité pétrolière</b>	12,0	23,0	31,5	57,2	54,6
<b>Source.</b> A.Dahmani, L'Algérie à l'épreuve...Op.cit. p.35.					

In practice, the intervention of the state has materialized by the establishment of a centralized economy encouraged by oil revenues, based on the transfer of the sources of wealth to the state. This submission, by act of public power, of economic society to the state, manifested through putting under administrative supervision of the activities and economic agents (public or private), a massive public investment in all sectors activity, including industry, the establishment of an absolute state monopoly on foreign trade, and finally a monetary power.

The Algerian experience of development was a voluntary attempt to create an economic system that rejected the market logic in favor of a managed economy and semi-autarkic operating decisions by the political authority.

The results of this have caused deep structural imbalances, preventing the engagement of the whole dynamic of accumulation. Structural deficits of public companies have caused the suffocation of the real economy by the oil income sphere, the concentration of income in the private sector, development of the informal sector, finally the widespread practices of corruption and cronyism.

The result of this rejection resulted in the training of economic activity to serious imbalances whose consequences will permanently mark the future of the Algerian economy. Studies on the results of the Algerian model of development are unanimous: development strategy has not only achieved its stated objectives, but it plunged the economy into vicious circles preventing the engagement of all dynamic growth.

The results of this massive state intervention, highlights the significant and continuing decline in labor productivity and capital productivity which affect the whole economy. This situation resulted by a heavy deficit of state enterprises, and the double dependence abroad of the Algerian economy, both for its supplies for its funding (by the oil market).

To avoid the collapse of the system and ensure his "balance" the state has systematically resorted to injecting financial amounts increasingly important, thanks to the purchasing power that gave it oil revenues.

According to the authorities, this is to reduce the pressure of foreign debt (Table N°2) and advance sectors "late" while reducing the relative share of investment in resources devoted to the industry<sup>1</sup> (Table N° 3).

**Table 2: Debt repayments (10<sup>6</sup> US \$)**

	<b>1979</b>	<b>1980</b>	<b>1981</b>	<b>1982</b>
<b>Outstanding external debt</b>	26.191	26.537	22.952	20.284
<b>Repayment (principal + interest)</b>	2.690	3.711	3.879	4.184
Source : M. Goumiri, « L'offre de monnaie en Algérie », ENAG, Alger, 1993, pp. 202-203				

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<sup>1</sup> FMI, « Algérie : Evolution récente de l'économie », Document du FMI ronéotypé, 18 juillet 1985

**Table 3: Capital expenditures in total investments in%**

Investisments	1974-1977	1978-1979	1980-1984
Industry/all investisments	60.6%	62,2%	32,5%
Source : Calculs effectués à partir des tableaux dans « Monnaie, crédit et financement en Algérie », CREAD, Avril 1987			

However this new direction of investment which predicts a new economic policy has been possible thanks to the increase in external resources and therefore oil revenues. While our revenues were 113 billion dinars between 1970 and 1979 ten years, they will increase by 87% in just five years (Table No. 4).

**Table 4: Oil Revenues in 10<sup>6</sup> Dinars**

	1970-1979	1980-1984
Oil revenues	113	211
Source : Statistics O.N.S		

This new policy will be the source of greater dependence of the production system for its renewal and extension and the tensions generated by the state of development of other sectors, especially capital goods and property intermediate (cement, iron ...) the importation of these will increase by almost 60% for the period of the first Five Year Plan (1980-1984). In reality the crisis of the Algerian company reflects the antagonisms related to appropriation of oil profits. This appropriation does not involve capital on one hand and the work of the other, but the State as owner of the annuity and other stakeholders (workers, managers, outside ...). The problem of the distribution of national income between investment, consumption and repayment of external debt reflects the nature of the various powers that want to appropriate rent.

Since the Algerian economy remains subject to planning, we can not talk about institutional changes insofar official documents including resolutions adopted at the extraordinary congress of one party reaffirm that economic imbalances and social tensions, "are result of neglect, carelessness, non compliance with rules of conduct required by the organization and the building of a socialist economy and the lack of coordination and integration between different production companies and non-compliance with planning requirements"<sup>2</sup> and decides that "the plan must be prioritized and ordered targets requirements which apply to all economic agents

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<sup>2</sup> Resolutions of the Extraordinary Congress of the party (FLN) in June 1980, RASJEP n°3, septembre 1980



and operators, its objectives will be organized into a coherent whole and will be based on specific indicators definitions"<sup>3</sup>.

#### **4. DECLINES IN OIL REVENUES AND ECONOMIC REFORMS**

The strong external financial instability, born of shock of 1986, was accompanied by the accentuation of the imbalance in public finances. Revenue from the oil tax had fallen by almost 50% in 1986, while the pace of spending was maintained. As a result, the overall fiscal deficit had reached record levels in 1986 (13%) and 1988 (13.7%), relative to GDP, financed mainly by money creation. The centralized allocation of resources and the way oil price volatility resulted in financial instability that lasted until the mid-1990s, despite the stabilization and adjustment programs and exceptional financing correlative. It was necessary to reform the state intervention.

The reform implies a reorientation of state intervention in the sense of removing guardianship on the actions and the people exercised on public enterprises. In this case, the administration will have a regulatory role whose mission is to plan, regulate, standardize and promote activities.

This reform involves a series of measures affecting the economy regulation instruments namely the planning system, financial regulation, pricing, taxation, wages and the legal and regulatory framework that requires surgery.

The market is recognized as a regulator but what is its place next to the planning? Later the same report links this autonomy to achieve the strategic preferences of planning. We understand that autonomy is part of the planning and is only a decentralized way to achieve the objectives of the national plan. The plan dominates the market. This is the plan that regulates the market. Central element of management in the national economy, the authorities seem to retain the planned character of the national economy. The national plan was the subject of a special law<sup>4</sup> which are defined, the central plan and the business plan. However, the arrangements for this new planning system to introduce the company the concept of adaptation to the application and use of market values, which is a thinly veiled way to describe the market. It is recognized as a complementary mode of regulation in the presence of planning. These principles, planning and market are part of the line of reforms and abandoned in the countries of Eastern and attempted economic efficiency by market socialism. Before seeing the results of this new approach, we will first present the content of the planning system.

The plan retains its place in the economic organization, "Planning [...] constitutes the fundamental instrument for the management and operation planning of the national economy"<sup>5</sup>. The planning is based on two levels: the national economic and social development and that of sectorial planning with the medium-term business plan.

The national plan will ensure economic and social development by:

- The implementation of strategic projects
- The direction and regulation of the national economy

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<sup>3</sup> Résolutions Resolutions of the Extraordinary Congress of the party (FLN) in June 1980, RASJEP n°3, septembre 1980

<sup>4</sup> Loi du 12 01 88 relative à la planification

<sup>5</sup> Loi 88 02 du 12 janvier 1988 relative à la planification nationale

- The satisfaction of basic social and collective needs of society
- The organization of national solidarity by ensuring a fair distribution of national income and social transfers

- The sectorial consistency - The inclusion of the private sector in planning.

The transition to the market economy is often equated with trade liberalization and especially foreign trade. By the removal of barriers on foreign trade government reduce economic monopoly by the pressure from imports. If there is some truth in this logic, the state economy is disappearing as a result more attractive import prices compared to the prices of local products. As private capital attracted by these prices prefers to place on the market of imported products instead of investing in productive activities. In reality the trade liberalization is often accompanied by the proliferation of speculative market activities outside what remains far from the market economy. The self-regulating market will not install on the basis of the destruction of the old order<sup>6</sup>.

Incurring in connection with the rescheduling of external debt in 1994, Algeria engages in the structural adjustment program (SAP) with the help of the International Monetary Fund (IMF). This program aims to restore macroeconomic balances (see table 4). This commitment with an international body means that measures of "self-adjusting" taken by the Algerian authorities have not been conclusive.

**Table 4: External debt in Billion US \$ (1990-1996)**

	1990	1991	1992	1993	1994	1995	1996
Outstanding MLT	26,6	26,6	25,9	25,0	28,9	31,3	33,2
Rescheduling	--	--	--	--	4,64	9,29	12,71
Short-term debt	1,8	1,2	0,8	0,7	0,6	0,3	0,4
Debt stock	28,4	27,9	26,7	25,7	29,5	31,6	33,7
Debt service	8,9	9,5	9,3	9,1	4,5	4,2	4,3
Debt stock / GDP (%)	46,7	62,7	55,6	51,5	70,2	76,2	73,7
Stock of debt / export. (%)	211,9	216,8	219,9	231,7	307,8	288,6	241,1
Debt service / export. (%)	66,4	73,9	76,5	81,5	47,2	38,8	30,7
Oil price in \$ US	23,61	20,06	19,33	17,00	15,80	17,01	20,70
Source : A partir, « la situation économique et financière » Ministry of Finance Algeria, 2001							

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<sup>6</sup> N. Holcblat, « Pays de l'Est : vers le marché réellement existant », Cahier des Sciences Humaine n°30, 1994

**Table 5: Growth rate of industrial public non-hydrocarbon sector (1991-1995)**

<b>year</b>	<b>Rate of growth</b>
1991	- 7,0%
1992	- 2,5%
1993	- 1,5%
1994	- 8,5%
1995	- 0,5%
<b>1991-1995</b>	<b>- 4%</b>

These reforms have met with many ambiguities and resistances in their application. Poor performance, lack of solvency of the Algerian economy on one hand and the resistance to the other changes made that public authorities, in the absence of a credible alternative, bend the side of social stability. Those latter oppose their refusal to reschedule the international monetary institutions proposed by the vision of the time, rescheduling for them (the government), "is an admission of failure or bankruptcy of the continued economic and social policy until there. [...] it] Could make the situation uncontrollable because of the social impact it would inevitably cause"<sup>7</sup>.

In our case, the market economy Option is motivated by three reasons:

1 / The drop in oil prices has led the authorities to adjust economic policy based on the fall in oil revenue that financed all other sectors of the economy<sup>8</sup>.

2 / A pragmatic vision<sup>9</sup> is to justify the reforms by the accumulation of public deficits and increasing public debt. Reduced financial capacity of the state that it can no longer advance funds to the already heavily indebted companies<sup>10</sup>.

3 / The socialist countries and the international movement that made the market economy a universal reference for efficiency and performance. Through privatization are listed the objectives<sup>11</sup> of increased efficiency, improve product quality and stimulating innovation.

To move from centralized regulation to a market economy, the government began a gradual liberalization through a series of regulatory measures. These measures affect the institutional environment that D. North defines as "all political rules, social, fundamental legal constitutes the foundation on which can develop the production, exchange and production. Rules governing elections, property rights and contract law are examples. [...]". "In Algeria, these measures concerned, freedom of pricing and institutionalization of competition, liberalization of foreign trade, private investment, reform of the monetary and financial market, the labor market and the privatization of public enterprises.

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<sup>7</sup> CNES, « Les effets économiques et sociaux du programme d'ajustement structurel », bulletin officiel n°6

<sup>8</sup> B. Decaluwé, J. Cockburn et S. Vézina, « Etude sur le système d'incitations et de protection effective de la production en Algérie », Rapport préliminaire, Associés pour le Développement Économique International (ADEI), octobre 2001

<sup>9</sup> Juvin H., « Les répercussions économiques et financières », in F. Dion (Coord.), « Les privatisations en France », La Documentation Française, 1995, p. 85-119

<sup>10</sup> Griotteray A., « Mieux privatiser – Évolution du secteur public en France et en Europe : bilan et perspectives », La documentation Française, 1994.

<sup>11</sup> Finance et développement, Revue du FMI, mars 1990

#### 4. THE 2000S: THE RETURN TO STATE INTERVENTION

After the plan of structural adjustment imposed by international institutions, the speech of the State in economic liberalization is officially maintained, but in fact the state reestablished with its interventionist conception of the economy. Result: the Algerian economy is highly centralized internally, but exposed to heightened external competition; on the other, it has significant financial resources in the form of idle hoarded currency reserves in foreign banks but the production of its industrial and agricultural sectors is in permanent decline.

The market in favor reforms initiated in the 1990s is questioned. In 1999, there was a redeployment of state power in the direct management of the public sector by reversing completely the relations linking the State to economic and monetary sectors. In place and instead of contractual relationships based on tax and prudential rules governing the monetary sphere, there is a direct interference of the state in the management and direction of the ebb and flow of wealth supposed to be regulated only by market forces. State guidelines concerning the management of the economic and financial sectors confirm the return of state intervention.

In this context the State launches a new model of economic growth through public investment. Since 2000, the Algerian economy is experiencing unprecedented affluence thanks to the evolution of international oil prices.

**Table 6: changes in taxation (2000-2016) in billion DA**

	2000	2002	2004	2006	2008	2010	2012
<b>Oil taxes</b>	520	916	862	2714	4004	2820	4054
<b>Ordinary taxation</b>	505	439	532	745	984	1309	1944
Ministry of Finance Algeria							

Foreign exchange reserves have increased to reach the end of 2009, a total of 149, 1 billion US\$, the equivalent of three years of importation.

Favorable economic conditions in the wake of the oil price increase gives the opportunity to the government to embark on a major investment program. Over the period 2000-2009, they accounted for in Algeria averaged 13% of GDP (19% in 2009 against 7.8% in 2000), the highest rate among the emerging and developing countries.

*Table following on the next page*

**Table 7: Structure of budget revenues and expenditures from 2001 to 2012**

	budget revenue	budgetary expenditures
2001	1 389,70	1321,00
2002	1576,70	1550,60
2003	1525,50	1690,20
2004	1606,40	1891,80
2005	1714,00	2052,00
2006	1841,90	2453,00
2007	1949,10	3108,60
2008	2902,40	4191,10
2009	3275,30	4246,30
2010	3074,60	4466,90
2011	3489,80	5853,60
Source : Ministère des Finances, Direction Générale des Prévisions et Politiques : Situation économique de l'Algérie, Année 2011, Aout 2013		

Here, we observe that the presence of oil revenues releases the budget constraint. Rising world oil prices has transformed the budgetary situation in Algeria. The share of revenues generated by oil and that of capital expenditure in the budget prepared by the government, have increased. In a Keynesian perspective, public spending is considered a growth factor of aggregate demand, stimulating the production is economic growth. What exactly these expenses?

Unlike the affluence of the state, the real economy has sunk into permanent stagnation, if not regression. The hydrocarbons sector continues to contribute to more than a third of national GDP, more than two thirds to budget revenue and almost all foreign exchange receipts of the State (97%). Indeed, despite the huge investments of the state under various economic recovery plans, the real sector of the Algerian economy remains weak.

## **5. FALLING PRICES, THE RETURN TO LIBERALISM**

The revenues of oil and gas fell by nearly 50% in the first quarter of 2015, pushing the Algerian government to make liberal use of foreign exchange reserves, according to a note from the Bank of Algeria

The revenue decline was caused by the fall in prices of oil, this energy pertaining to Algeria more than 95% of its external income and accounting for 60% in the state budget.

**Table 8: changes in taxation (2014-2016) in billion DA**

	2014	2016
<b>Oil taxes</b>	1578	1683
<b>Ordinary taxation</b>	2267	2723
Ministry of Finance Algeria		

In the first quarter 2015, the country exported \$ 8.7 billion against 15.6 billion in the first quarter 2014. The average price per barrel of oil, according to notes of the Bank of Algeria, increased from 109.55 to 54.31 dollars during the same periods.

Because of this, the balance of payments registered a record deficit of 10.72 billion dollars in the first quarter of 2015 against 0.098 billion in 2014.

To cope with demand, the government drew on the foreign exchange reserves fell by nearly 20 billion dollars in three months, rising to 159.918 billion dollars at end-March 2015 against 178.938 billion dollars late December 2014.

He also delved into the fund of regulation of revenue (FRR), funded by the differential between the real oil price and the expected price of 37 dollars per barrel.

The impact of public finances, heavily dependent on oil taxes, is reflected in the widening budget deficit and erosion fastest RIF resources that finance the budget deficit, observes the Bank of Algeria.

## 6. CONCLUSION

According to the theory of the oil state, the state has significant budgetary revenues does not need to establish a real tax system and therefore does not need to compromise with different social strata. It becomes autonomous in relation to the company. A state that does not require the society to reproduce it self. The latter, with many advantages can demand accountability from the state.

This theory that preaches for oil determinism excludes democratic demands and thus any opening on liberalism. Arab countries are considered refractory to liberalism because of their hydrocarbon wealth. They do not need the values of freedom and democracy to reproduce their political and social system. They are an exception to the global movement towards modernity. In our view, this exception which Algeria is a part, denies that there is a social contract between the state and society based on historical and cultural values. We would say that the state derives its legitimacy from these values and keeping with these values. Any questioning of the established order is considered an attack on the nation. Here, the state is there to defend those values.

We can say that the growth model driven by the state failed. In wanting to build an economy from the market, the state has caused a vicious cycle involving SOEs deficits, monetary expansion / inflation, market segmentation and emergence of the informal economy

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## TREATMENT-RELATED NATURALIZATION PREMIUMS IN TWO EUROPEAN COUNTRIES: EVALUATION AND COMPARISON

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### ABSTRACT

*We conduct empirical study in order to estimate the impact of naturalization on labor market integration through comparison of the treatment in labor markets towards naturalized and non-naturalized first generation immigrants to that of the native population. Moreover, the analyses were conducted for two European countries that differ in their accessibility to naturalization through different citizenship-policy characteristics. The study contributes to the existing migration and naturalization literature by (1) comparing the relationship towards naturalized and non-naturalized migrants in European labor markets to that of native population, and (2) trying to estimate the impact of citizenship-policy characteristics on the treatment in labor markets after naturalization.*

*The results of the paper suggest the existence of high naturalization premiums and full socioeconomic integration of naturalized migrants in the observed country with softer naturalization policies (France), but do not show any naturalization premiums in the country with strict naturalization policies (Denmark). This finding questions the use of stricter citizenship policies for better socioeconomic integration of immigrants.*

**Keywords:** *citizenship policy, naturalization, naturalization premium, treatment in labor market, socioeconomic integration*

### 1. INTRODUCTION AND LITERATURE REVIEW

During recent decades, the studies of the determinants, causes and benefits of naturalization have created a well developed body of research for many countries (Bratsberg, Ragan and Nasir, 2002; DeVoretz and Pivenko, 2004). Some of these studies focus on the impact of various individual characteristics, as well as origin and destination country characteristics, on the citizenship obtainment at the destination countries. Others try to estimate the socio-economic benefits of naturalization through testing for the impact of the destination country citizenship on the employment probabilities and labor incomes.

In economic literature, the citizenship is defined as a legal status that expresses the state-individual relationship, and grants some rights to their holders, which include physical and political protection and the right to vote. These set of rights clearly popularizes naturalization, which is defined as citizenship acquisition for immigrants in the countries of destination. Moreover, the act of naturalization of immigrants also serves as a signal for native potential employers that the applicant intends to stay and work in the country of destination. This signal together with the direct reduced administrative costs from the employer's perspective may increase both the chances of employment for naturalized immigrants and their labor incomes once employed (Vink, Prokic-Breuer and Dronkers, 2013; Steinhardt, 2012).

During the recent decade many studies of the determinants and benefits of naturalization have been conducted for countries that serve as the most popular destinations for immigration, like the US (Bratsberg, Ragan and Nasir, 2002), Canada (DeVoretz and Pivenko, 2004), and many European countries including Germany (Steinhardt, 2012), Sweden (Mattias, 2011), France (Fougere and Safi, 2008) and the Netherlands (Bevelander and Veenman, 2008). Most of the literature showed a strong and significant positive naturalization premiums in the observed countries even after controlling for individual characteristics (Bratsberg, Ragan and Nasir, 2002;



DeVoretz and Pivenko, 2004; Fougere and Safi, 2008). However, while there is enough evidence of this sort of positive relationship between naturalization and economic outcomes, there is still very limited literature that would conduct cross-country comparisons in order to determine the effect of citizenship policies on this relationship. One example of a cross-country comparison study is conducted by Bevelander and Pedakur (2012) for Canada-Sweden couple, where the authors showed that naturalization has a positive impact on both the employment probabilities and relative incomes of immigrants, and that this impact is stronger in Sweden which has very low barriers to naturalization. On the other hand, in their Denmark-Sweden comparison Helgertz, Bevelander and Tegunimataka (2014) again considered Sweden as the country with lower barriers to naturalization and obtained very similar naturalization premiums for both countries, questioning the use of more accessible citizenship laws for better economic integration of immigrants.

However, to our knowledge, there is still no empirical comparison of the returns to personal characteristics of both naturalized and non-naturalized immigrants, to those of native population in labor markets at destination countries. We claim that the latter is very important for evaluation of actual naturalization premium, since the present findings fail to assess the level of socioeconomic integration of naturalized immigrants in the countries of destination. In this paper, we conduct such a study in order to determine the impact of naturalization on the treatment in the labor markets rather than simply estimate the employment and wage premiums of naturalization. Moreover, the analyses are conducted for European countries that have different policies for citizenship obtainment by that also attempting to obtain an estimate of the impact of citizenship policies on the treatment in labor markets after naturalization.

## 2. METHODOLOGY

In our analyses we use a version of Mincer (1958) general capital earnings equation in order to estimate the income structures for individuals belonging to each of the three groups based on the type of their citizenship and naturalization status (i.e. naturalized immigrants, non-naturalized immigrants and native population) separately for each country of interest. These estimates are later used in the income decomposition analyses to measure and test the significance of differential treatment towards either of the presumably disadvantaged groups. This identification model is heavily used in the empirical literature in earnings decomposition analyses. The proposed income equation model may be specified by the following equation:

$$\ln(Y) = \beta_0 + \beta_1 E + \beta_2 T + \beta_3 O + \beta_4 C + \beta_{5k} Other_k + e, \quad (1)$$

where Y is the hourly employment income of individuals; E is the years of education; T is the current job tenure (the age of individuals was used as a proxy); O is the type of occupation (managers, skilled workers and laborers); C is other job information (size of the firm, number of subordinates, etc.); Other is a vector of other individual personal characteristics (k) including marital status, and the number of children; and e is the error term.

After separate estimations of the income structures for each of the three groups in every country of interest we propose to employ Oaxaca and Ransom (1994) theoretical model for income decomposition, which is a model heavily employed in empirical literature to evaluate treatment towards workers in labor markets (Beblo, Beninger, Heinze and Laisney, 2003). According to this model, we will first construct a “country-equalized” income structure ( $\beta^*$ ) or the income structure which would have been applicable for all three groups in a particular country in the absence of any sort of treatment or benefit differences. In our decomposition analyses for the construction of these “fair” income structures we used the method based on Oaxaca and Ransom (1994) suggestion that this estimate should be the one obtained from the pooled sample of all groups.

Finally, after obtaining the income structure estimates for each group through equation (1) and the “country-equalized” income structures, the logarithmic decompositions of the labor income differentials at the means for each country will have the following forms:

$$\ln \bar{Y}_c - \ln \bar{Y}_m = (\bar{X}_c - \bar{X}_m)' \beta^* + \bar{X}_c' (\hat{\beta}_c - \beta^*) + \bar{X}_m' (\beta^* - \hat{\beta}_m), \quad (2)$$

$$\ln \bar{Y}_c - \ln \bar{Y}_n = (\bar{X}_c - \bar{X}_n)' \beta^* + \bar{X}_c' (\hat{\beta}_c - \beta^*) + \bar{X}_n' (\beta^* - \hat{\beta}_n), \quad (3)$$

$$\ln \bar{Y}_n - \ln \bar{Y}_m = (\bar{X}_n - \bar{X}_m)' \beta^* + \bar{X}_n' (\hat{\beta}_n - \beta^*) + \bar{X}_m' (\beta^* - \hat{\beta}_m), \quad (4)$$

where  $\bar{Y}_c$ ,  $\bar{Y}_n$  and  $\bar{Y}_m$  are the mean hourly employment incomes of native population, naturalized immigrants, and non-naturalized immigrants respectively;  $\beta^*$  is the “country-equalized” employment income structure estimated for each country;  $\bar{X}_c$ ,  $\bar{X}_n$  and  $\bar{X}_m$  are the vectors of mean values of the overall regressors from equation (1) respectively for native population, naturalized immigrants, and non-naturalized immigrants; and  $\hat{\beta}_c$ ,  $\hat{\beta}_n$  and  $\hat{\beta}_m$  are the conforming vectors of coefficients estimated by equation (1) for the corresponding data samples.

The first terms in the right-hand side of equations (2), (3) and (4) present estimates of productivity differentials or the income gap caused by different average individual characteristics between the corresponding groups. Whereas, the second and the third terms estimate the unexplained components of the difference which are caused by differentiated returns to individual characteristics. The estimation of the value and the significance of the latter for each of the country-based (also gender-based) sub-samples is the main aim of the paper.

### 3. DATA

The main results of the paper are obtained using the 2010 data samples for France and Denmark from the Luxembourg Income Study (LIS) database. Among other things, LIS include personal-level micro-data on demographic characteristics, employment and individual incomes for most European countries. Remote access to the data use was obtained, and the analyses were conducted using LISSY web user interface. The collection of LIS database is organized in regular waves (mainly with a 2-year interval), but it does not follow the same individuals over years which unfortunately does not allow us to fully control for the observable and unobservable individual characteristics. However, we consider this data to be appropriate for the proposed analyses.

As described in the methodology section, the data from each country was divided into three sub-samples based on their origins and naturalization status, and the analyses were conducted separately for each gender. The data sample was also limited to include only those individuals of appropriate working-age and to include only those first generation immigrants who are eligible for naturalization (have lived at least the minimal required durations in the countries of destination). The requirement of eligibility for naturalization is crucial for our analyses, since it allows neglecting some other individual characteristics which may be responsible for differences in treatment in the labor markets, the main one of which is the experience and the duration of residency at the countries of destination.

### 4. RESULTS

The analyses were conducted on the 2010 data samples for two countries of interest (France and Denmark) using the Luxembourg Income Study (LIS) database. The two countries of interest were chosen for their differences in the naturalization laws and citizenship obtainment requirements<sup>1</sup>, as well as the availability of required variables in the data. The whole data for both countries was restricted to include only individuals of appropriate working age (25-54)

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<sup>1</sup> Information regarding the naturalization policies of the chosen countries are available upon request.

and was divided to groups based on gender as well as nationality and citizenship status of individuals. Through the latter differentiation we categorized individuals to groups of migrants eligible for naturalization (migrants with the duration of residence at least as long as that required for naturalization), naturalized migrants and native population.

*Table 1: Employment Status of Individual of Working age by Country, Gender and the Type of Citizenship Registration.*

<b>Denmark</b>		Employed	Un-employed	Not in LF/ House-maker	N
Male	Eligible Migrant	62.93%	6.51%	30.56%	1152
	Naturalized Migrant	68.84%	5.22%	25.93%	1608
	Native	84.70%	2.99%	12.32%	29367
Female	Eligible Migrant	52.29%	6.04%	41.67%	1375
	Naturalized Migrant	64.62%	4.32%	31.07%	1806
	Native	81.29%	2.56%	16.16%	30031

<b>France</b>		Employed	Un-employed	Not in LF/ House-maker	N
Male	Eligible Migrant	60.14%	26.98%	12.88%	567
	Naturalized Migrant	84.38%	10.34%	5.29%	416
	Native	87.69%	8.91%	3.39%	5475
Female	Eligible Migrant	27.28%	28.06%	44.66%	898
	Naturalized Migrant	61.11%	17.28%	21.60%	486
	Native	74.12%	13.02%	12.86%	6398

We started our analyses by some data descriptive statistics in order to determine the observable differences between the average characteristics of individuals belonging to each group based on their country, gender, and citizenship status. Table 1 describes the composition of the data based on the employment status of individuals belonging to each group.

The data suggests the presence of possible employment selectivity issue within our country representative data samples. Except for the group of male naturalized migrants in France, all other migrant groups seem to be positively selected into employment based on the low percentages of individuals being employed. Such selection may be an issue since it may later cause some bias in our regression results if the individual characteristics that affect the employment status also impact the individual incomes once they are employed. In particular, when estimating the returns to individual characteristics through regression analyses, this selection bias may cause overestimation of the effects of individual characteristics that have positive impact on employment, and underestimation of the effects of individual characteristics that have negative impact on employment. However, despite the measurable differences in the employment rates, we considered such selection not much an issue, because it may have only negative impact on the native-migrant difference in returns to characteristics and by that will provide us with a lower bound of differential treatment not caused by personal characteristics later in our decomposition analyses.

*Table 2: Descriptive Statistics of Average Individual Characteristics of Workers in Paid-employment Sector by Country, Gender, and the type of citizenship status.*

Country / Gender	Person Status	Log of Income	Log of PPP adjusted Income/h.	Age	Number of Children	Married	Education (3-level ranking)	N
<b>Denmark / Male</b>	Eligible Migrant	12.71	3.31	41.19	1.29	0.68	2.09	377
	Naturalized Migrant	12.71	3.32	40.86	1.29	0.61	2.25	665

<b>Denmark / Female</b>	Native	12.85	3.46	40.63	1.11	0.57	2.23	16047
	Eligible Migrant	12.45	3.05	40.73	1.51	0.70	2.12	485
	Naturalized Migrant	12.51	3.11	40.38	1.36	0.63	2.33	804
	Native	12.61	3.22	40.73	1.25	0.60	2.35	17469
<b>France / Male</b>	Eligible Migrant	9.58	2.43	40.33	1.87	0.52	1.56	250
	Naturalized Migrant	9.93	2.78	42.37	1.55	0.61	1.99	280
	Native	10.01	2.87	40.84	1.38	0.54	2.10	4040
<b>France / Female</b>	Eligible Migrant	9.09	1.95	39.69	1.82	0.52	1.60	200
	Naturalized Migrant	9.55	2.40	42.07	1.57	0.64	2.03	258
	Native	9.70	2.55	40.75	1.32	0.49	2.22	4297

We employed the natural logarithms of the hourly net employment income (with the adjustment to purchasing power parity)<sup>2</sup> as the outcome variable in our main regression analyses. The average values of this variable for each group are provided in Table 2 together with the average values of the main set of explanatory variables.

Unfortunately, when limiting the data to the samples of individuals employed in paid employment sector<sup>3</sup> and with non-missing values for all explanatory variables that were used in the regression analyses, the numbers of observations for each group reduces significantly, but we are convinced that they are still enough to ensure the robustness of our results. We can notice some measurable differences in hourly incomes between the three citizenship-status type groups (citizenship groups), which is especially high for the natives-eligible migrants' couple. The groups of native population have the highest hourly wages among the three citizenship groups for both countries and genders, which may indicate to citizenship-based differential treatment. However, some measurable differences are also observed in the variables that are generally considered (and proven) to have impact on the incomes which brings uncertainty in the source of this inequality. In particular, the groups of natives are prone to have on average higher level of education and less children. Both these variables are generally considered to have impact on hourly incomes, which highlights the need for decomposition analyses.

Before going to the decomposition analyses, we first estimated multinomial logit models<sup>4</sup> in order to determine occupational attainment probabilities separately for each citizenship group. We then used these model estimates to predict the occupational allocation probabilities for individuals with mean individual characteristics of each citizenship group, when being treated as individuals belonging to another citizenship group. The results of these analyses based of mean individual characteristics are presented in figure 1 and figure 2. We divided the occupations to three general groups: managers and professionals, other skilled workers, and

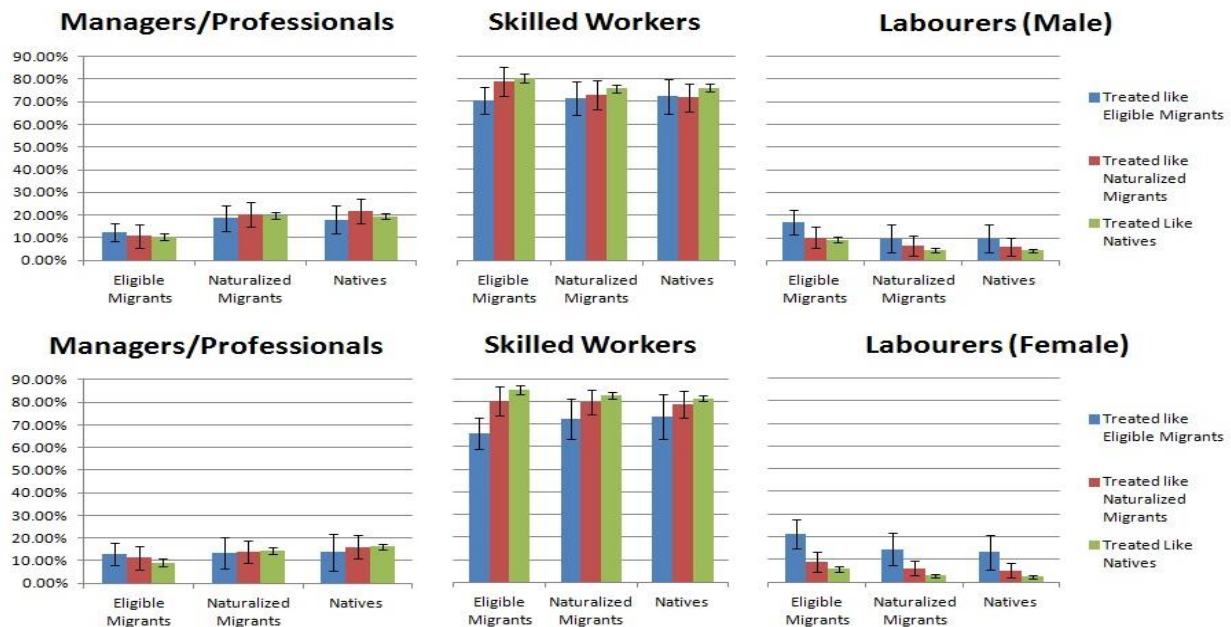
<sup>2</sup> The PPP conversion factors for France and Denmark were obtained from the World Bank official website. The average annual working hours was obtained from the economic research website of the federal reserve bank of St. Louis.

<sup>3</sup> We study only paid employment sector because of the low number of observations of naturalized individuals employed in self-employment sector, and the possibility that the wage structure of self-employed individuals may be very different from that of individuals employed in paid employment jobs (Hamilton, 2000).

<sup>4</sup> Multinomial logit model was preferred to ordered probit model because of the absence of obvious hierarchical order among the occupations.

laborers and elementary workers. The letters became the reference groups whose coefficients are normalized to zero in the multinomial logit models. The independent variables in these models included age, education, marital status and the number of children<sup>5</sup>.

*Figure 1: Multinomial Logit Predictions of Occupational Attainment Models for France for Individuals with Mean Individual Characteristics of Each Citizenship Group by Gender.*

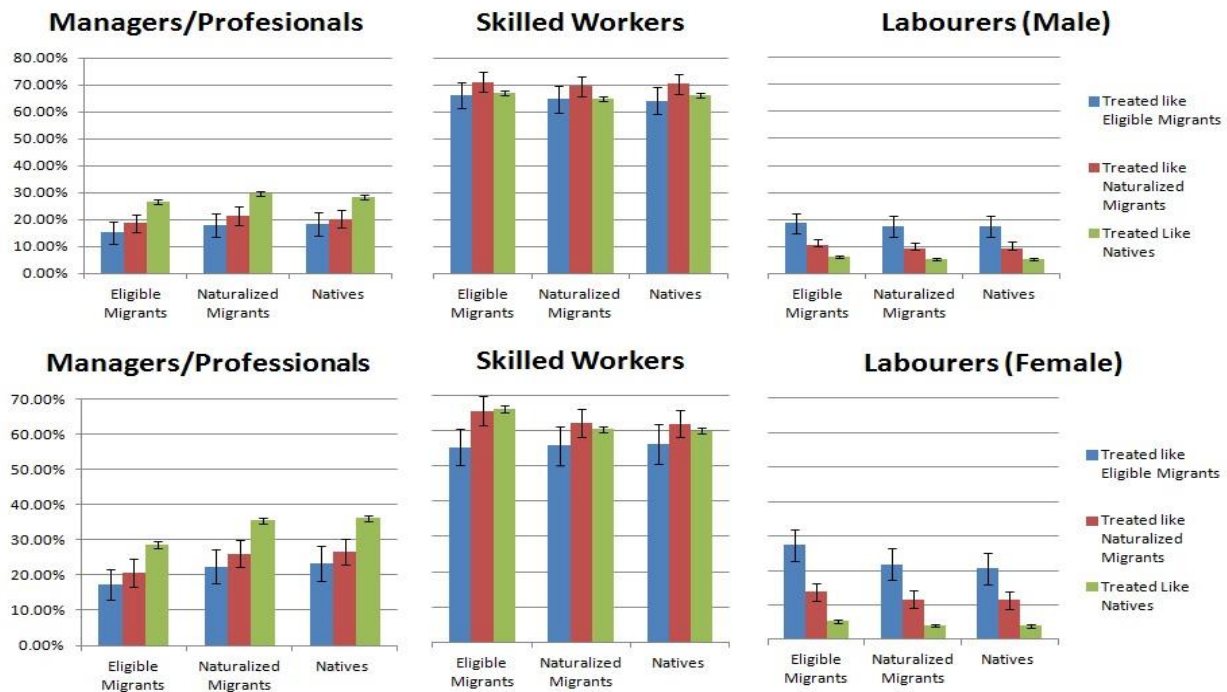


Upper and lower bars represent 95% confidence interval

*Figure following on the next page*

<sup>5</sup> The regression results of the multinomial logit models for each group are available upon request.

Figure 2: Multinomial Logit Predictions of Occupational Attainment Models for Denmark for Individuals with Mean Individual Characteristics of Each Citizenship Group by Gender.



Upper and lower bars represent 95% confidence interval

The differences between the observed (being treated similar to the actual group belonging) and predicted occupational distributions for each citizenship group may indicate to occupational segregation of the labor market for the corresponding country and gender. It is visible from figures 1 and 2 that based on the observable individual characteristics mentioned earlier, the groups of migrants (both naturalized and eligible for naturalization) are mostly being disadvantageously treated in their occupational allocations. However, there are some specifications that we want to highlight.

In France, which in our analyses is the country with softer naturalization policies, there is almost no occupational segregation on the management level or the top occupational level in our 3-level occupational differentiation. Moreover, most of the segregation is concentrated between the two types of migrants suggesting that the occupational segregation in France is limited mostly to the citizenship status rather than nationality.

On the other hand, in Denmark, a country with stricter naturalization policies, occupational segregation is not only visible in all three levels of occupations but it also clearly doesn't limit itself to the type of citizenship status, since it persists and is mostly concentrated in the natives-naturalized migrants' couple. Comparing the obtained results from France and Denmark, the findings suggest higher occupational segregations in Denmark and question the use of more strict naturalization policies for better socioeconomic integration of migrants through wider occupational attainment possibilities.

For the sake of space saving, the hourly income regression results for each of group are not presented in the paper and are available upon request. The main results of the paper, i.e. the decomposition results of the average income differences by the two components that may and may not be explained through the differences in observable characteristics (respectively explained and unexplained components), are presented in table 3.

*Table 3: Hourly Employment Income Decomposition Results by Country and Gender.*

VARIABLES	Denmark Paid-employment (Male)			Denmark Paid-employment (Female)		
	Native - Eligible Migrant	Native - Naturalized Migrant	Naturalized - Eligible Migrant	Native - Eligible Migrant	Native - Naturalized Migrant	Naturalized - Eligible Migrant
	(1)	(2)	(3)	(4)	(5)	(6)
Prediction_1	3.46 (0.00)	3.46 (0.00)	3.32 (0.03)	3.22 (0.00)	3.22 (0.00)	3.11 (0.02)
Prediction_2	3.31 (0.03)	3.32 (0.03)	3.31 (0.03)	3.05 (0.03)	3.11 (0.02)	3.05 (0.03)
Difference	0.15*** (0.03)	0.14*** (0.03)	0.0091 (0.04)	0.17*** (0.03)	0.11*** (0.02)	0.062 (0.04)
Explained	0.014 (0.02)	-0.013 (0.01)	0.027 (0.02)	0.078*** (0.01)	0.023* (0.01)	0.055*** (0.02)
Unexplained	0.13*** (0.03)	0.15*** (0.02)	-0.018 (0.04)	0.091** (0.03)	0.084*** (0.02)	0.0075 (0.03)
Observations	16,424	16,712	1,042	17,954	18,273	1,289

VARIABLES	France Paid-employment (Male)			France Paid-employment (Female)		
	Native - Eligible Migrant	Native - Naturalized Migrant	Naturalized - Eligible Migrant	Native - Eligible Migrant	Native - Naturalized Migrant	Naturalized - Eligible Migrant
	(1)	(2)	(3)	(4)	(5)	(6)
Prediction_1	2.87 (0.01)	2.87 (0.01)	2.78 (0.04)	2.55 (0.01)	2.55 (0.01)	2.40 (0.05)
Prediction_2	2.43 (0.05)	2.78 (0.04)	2.43 (0.05)	1.95 (0.07)	2.40 (0.05)	1.95 (0.07)
Difference	0.44*** (0.05)	0.083* (0.04)	0.36*** (0.06)	0.61*** (0.07)	0.15** (0.06)	0.46*** (0.09)
Explained	0.22*** (0.02)	0.015 (0.02)	0.21*** (0.03)	0.33*** (0.03)	0.073** (0.03)	0.26*** (0.04)
Unexplained	0.22*** (0.04)	0.068* (0.03)	0.15** (0.05)	0.27*** (0.06)	0.079 (0.05)	0.20* (0.08)
Observations	4,290	4,320	530	4,497	4,555	458

Standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

It is important to highlight at this point that all the regression models for income structures include the occupational statuses of individuals in the same way as presented in figures 1 and 2. This means that the differences in average group incomes as a result of occupational segregations suggested earlier are being captured in the explained components.

When looking at the decomposition results for Denmark (first part of table 3), we can see that the native-migrant differences in employment incomes that are not attributable to individual characteristics (unexplained components) are not bound only to the citizenship status of migrants, since such income differences are present for the native-naturalized migrant pairs for both genders. Moreover, the results suggest that there are even no significant naturalization premiums in Denmark for both genders working in paid employment sector once we control for the differences in observable characteristics. These results are in contradictory with some of the previous studies in the field that suggested the existence of naturalization premiums for some groups of migrants in Denmark (Helgertz, Bevelander and Tegunimataka 2014).

The decomposition results for France (second part of table 3) show that the native-migrant differences in hourly incomes not attributable to individual characteristics almost entirely depend on the citizenship acquisition and mostly disappear after naturalization. There is still some small unexplainable component present in the native-naturalized migrant income differences for males. However, the overall results for France show the existence of high naturalization premiums for both genders which may reach up to around 30-35 % of the total native-eligible migrant differences in hourly employment incomes.

## 5. CONCLUSION

In this paper we conduct labor income decomposition analyses for naturalized and non-naturalized immigrants as well as native population at destination for two countries with different citizenship registration policies, and compare the returns to average personal characteristics of individuals belonging to each of the three groups.

The results suggest the existence of high naturalization premiums in France but do not show any naturalization premiums in Denmark. Moreover, based on the unexplained components in the native-migrant employment wage differences, we can judge that after naturalization migrants become fully integrated in labor market in France and become treated similar to natives, but this is also not the case in Denmark. It is also important to mention that because of the possible employment selectivity issue for migrants as well as other possible selectivity issues for naturalization, which we did not control for in our analyses, the obtained results only reveal the lower bound of the income differences, meaning that the unexplained components in income differences may be even higher if we generalize the results to the whole samples of migrants. Considering the fact that in our analyses Denmark is the country with stricter naturalization policies, these findings question the assumption that stricter naturalization policies result in better socioeconomic integration of migrants, and suggest that it may be the treatment towards immigrants that results in formation of naturalization policies.

The findings of the proposed study may help the policymakers in the sphere of migration to come up with appropriate citizenship policies in order to attain the desired level of immigrant integration in labor markets.

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## MONETARY POLICY: FROM ADOPTING INFLATION TARGETING TO ZERO LOWER BOUND INTEREST RATES

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### ABSTRACT

*Since 1990 most of central banks have begun adopting inflation targeting as their monetary policy regime and main framework for price stabilization. Within this regime, central banks choose medium-term inflation target and then manipulates short-term interest rates to control inflation rate, on the one hand and unemployment rate and output on the other hand. So, theoretically, this policy ultimately provides the central bank's objectives.*

*This regime was quite effective till the crisis of 2008. However, after the crisis it becomes obvious that inflation targeting is not perfect regime enough, for counter-cyclical regulation. The main proof of this argument is the unconventional policy such as quantitative easing or forward guidance, which was widely conducted by world's leading central banks, alongside reduction in short term interest rates during and after crisis period.*

*In this paper we analyze the results, reached within inflation targeting regime since its adoption. Also the future, post-crisis prospects of this regime in condition of zero lower bound interest rates and unconventional monetary policy, conducted by central banks. The main objective of the study is to answer the question: How much important is the transformation of the traditional monetary policy activities to unconventional policy and may it lead us to the adoption of the new regime of monetary policy.*

**Keywords:** *Inflation targeting, monetary policy, quantitative easing*

### 1. INTRODUCTION

Historically quantity variables have had pride of place in monetary analysis. Before the mid-1980s, for instance, among the key elements in mainstream analyses of monetary policy were (in addition to the policy rate): central bank market operations in government securities markets; the liquidity of financial markets; and market expectations of the future. But from 1990th significant changes happened. From this period world central banks started adoption of inflation targeting as their policy framework. This framework was developed during 'the Great Moderation' and In 1990 New Zealand Central Bank was the first to conduct monetary policy under this regime.

This regime of monetary policy is based on link between short-term interest rate, output (unemployment) level, and inflation rate. Namely, low interest rate stimulates output level which causes higher inflation rate and vise-versa. So within this framework central bank chooses desired inflation target and then manipulates its short term interest rate to stabilize inflation rate around the target in medium-term period on the one hand, and countercyclical fluctuations of output on the other hand. These two results eventually meets the central bank objectives. So by adopting this framework central banks had given the recipe of monetary policy. This regime replaced monetary targeting regime which was mainly based on "the quantity theory of money". In spite of the simplicity of new regime and its popularity across

the world central banks, after 2008 financial crisis, it become obvious that orientation to the short-term interest rates may not be enough and some new tools was needed. As a result of this unusual conditions, central banks started implementation of some untraditional monetary tools. The first section of this paper analyses main achievements of inflation targeting regime against inflation. There are discussed the countries which conducted disinflation after adoption this regime, and also characteristics of it. The second section describes the actions of the world's leading central banks (including FED and BOJ which officially announced their inflation target in 2012) after crisis period and it is dedicated to the post-crisis unconventional monetary policy instruments, causes of their implementation, effects and risks.

## 2. INFLATION TARGETING: POWERFUL REGIME FROM 1990S

By 2015 more than 35 central banks, including ECB and FED conducted their monetary policy within inflation targeting framework. From 1990<sup>th</sup>, the framework of this regime was successfully implemented by central banks for price stabilization. This is proved by the empirical evidence that inflation have not been problem after adoption of this regime.<sup>1</sup> Moreover, this regime become quite successful tool for disinflation process for some countries. Israel, Poland, Turkey, Serbia, Chile, Colombia Mexico and Brazil belongs to this countries. (Diagram 1). This processes was conducted by “crawling target” which means updating the target point of inflation downwards frequently, alongside managing of the expectations. For example Israel was one of the successful country in this point of view which fully changed its monetary framework from fixed exchange rate to inflation targeting in 1996. From this year to 2002, actual inflation was reduced from double-digit point to 3 percent. Target point of inflation was also reduced from 10-11 percent to 2-3 percent interval. Similar policy was implemented in Chile which was the first in Central and South America used this regime in 1993. From this period to 2000 double-digit actual inflation was reduced to 2-3 percent and inflation target from 14 to 3 percent.

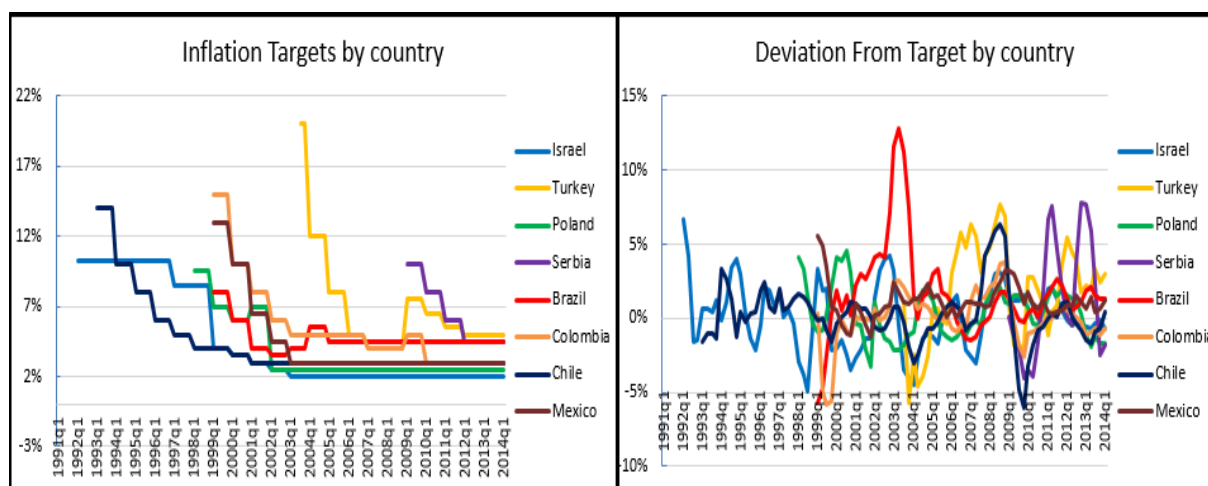


Diagram 1. Dynamics of inflation targets and deviations from target (Source: IMF, [www.tradingeconomics.com](http://www.tradingeconomics.com))

The first part of the Diagram 1 shows inflation targets by year for above mentioned 8 countries and the second part of this diagram shows the dynamics of absolute deviations from target. According to this evidence there are quite frequent downward updates of the target point in

<sup>1</sup> The information about it can be shown by diagram 2, where you also can see target points of inflation and deviation from this targets for quite long time.

condition of “crawling target”<sup>2</sup>. Diagram also shows that actual inflation is stabilized around the target in medium-term. As for the size of deviation of actual inflation from its target, two big deviation towards deflation within this regime is associated with the recession in the end of 1990s and beginning of the 2000s which influenced most of the world’s countries<sup>3</sup>, but most economics was rescued quickly which was partly deserve of the inflation targeting traditional recipe<sup>4</sup>. The other deviations are much depended on the numerical size of inflation target. Namely, in the countries with higher inflation target, actual inflation is more deviated from it in short-term and vice-versa. (Diagram 2).

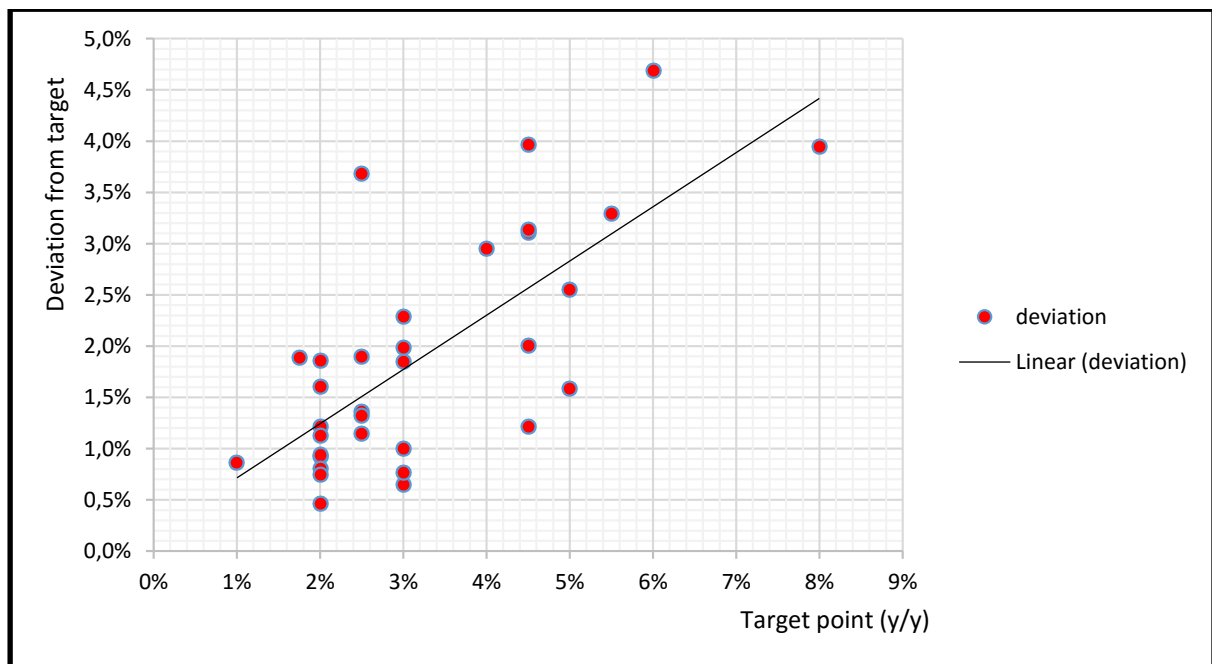


Diagram 2. Inflation targets versus standard deviation from target (Source: IMF, [www.tradingeconomics.com](http://www.tradingeconomics.com))

On the Diagram, there are plotted 36 central banks inflation targets (horizontal axis) and standard deviations from this target (vertical axis). Calculation of Standard deviation is based on some imitations:

1. The central banks which rarely or never change their inflation targets there are taken the last target set by them. (for example: New Zealand, South Africa, Canada, Sweden, Norway)
2. To exclude disinflation periods when deviation can be more than naturally, for the countries which changes their inflation targets frequently (not more than in every two year periods), inflation data is taken from the time after which target was changed upwards or have not changed for more than two years. As for inflation target, for plotting purpose there is taken its average point (for example: Turkey, Israel)
3. Several central banks conduct inflation targeting regime with range target. For these central banks we equalize target to the average of their upper and lower bounds (For example: New Zealand, Indonesia, Australia)

<sup>2</sup> “Crawling target” do not necessarily mean updating of inflation target towards reduction but in this case we discuss countries with downward crawling target which is associated with disinflation.

<sup>3</sup> The third deviation during the 2008 recession is discussed separately in the second section so we do not discuss it here.

<sup>4</sup> Central banks reduced their monetary policy rates during this period. Moreover, England which did not suffered from this recession reduced its policy rate and according to some economist this actions was one of the important reason from preventing recession.

According to the results, there are strong relationship between the numerical size of inflation target and standard deviation from this target. That's why most leading central banks have set target at 2-3 percent (this target is a little higher in emerging countries at about 4-6 percent)<sup>5</sup>. But after 2008 crisis wide discussion took place among economists about the effectiveness of target, set at 2-3 percent. Many economist points out that after the crisis central banks should take in consideration the possibility of increase of target point. Main argument to this is that low target means low inflation expectations which do not let central banks possibility of the sharp reduction in the real interest rate. (Blanchard 2010; Krugman 2014). The discussion about target numerical size was brought up because of the ineffectiveness of this policy against deflationary pressure.

To sum up, the result of inflation targeting was quite successful from 1990s actual inflation was around the target and one of the most important achievement of this regime is the success in market expectation management which is proved by empirical analysis. The main reason of this achievements is the nondiscretionary characteristic of this regime and also growth of central bank independence. (Shirai S. 2014)

But, after 2008 crisis, important changes took place in monetary policy rules. Traditional recipe of the inflation targeting framework – reduction in short-term policy rates during the recession, was actively used during and after 2008 crisis. For example BOE policy rate was reduced from 5 to 0.5 percent, ECB discount rate was dropped from 4.75 to 1 and then to 0.05 percent. FED reduced its policy rate from 6.75 to 0.5 percent. Simmilar policy was conducted in Canada, Sweden, Switzerland and most of other developed countries which is maintained till today. Despite zero lower bound interest rates in most of developed countries, it was not enough for escaping from deflationary pressure. Instead of it, the monetary policy of these countries was thrown to „the liquidity trap“ which remains the worst and unsolved monetary problem till today.

### **3. MONETARY POLICY IN POST CRISIS PERIOD: TRANSFORMATION FROM SHORT-TERM TO LONG TER INTEREST RATES AND RETURN OF “THE QUANTITATIVE THEORY OF MONEY”**

What should be the framework of monetary policy when traditional counter-cyclical instruments does not work? The answer is using unconventional or untraditional monetary tools which was adopted by most central banks within last decade. In this paper we discuss two of such instruments: Quantitative easing (QE) and negative interest rates on bank reserves.

Since the end of 1980<sup>th</sup> within New Classical Macroeconomics, central bank balance sheet and its influence on the economics was neglected. Quantitative Easing is the tool for monetary policy which is mostly oriented to the size and structure of the central bank balance sheet. Namely it means large scale purchase of long term bonds. By this action price of these bonds rises, and the yields decline. The final result is decline of the long term interest rates. The important aspect of this policy is the provision of economics with large amount of money. According to the “quantitative theory of money” increase in money stock should reflect in increase of price level and/or output level. As a result, both of these effects stimulates long term investments and growth of the economic activity. Quantitative easing (or QE) is considered when short-term interest rates are at, or approaching zero, and it does not involve the printing of new banknotes.

QE was first adopted by Bank of Japan from March 2001. Till 2006 the purchase of long-term bonds was increased by 5 trillion Yen per year. By 2004 the BOJ's balance sheet consisted

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<sup>5</sup> According to empirical evidence the only central bank in 2016 having inflation target more that 6% is Bank of Ghana with inflation target of 8%.

of 36 trillion Yen long-term bonds. The impact on economic activity of this policy, however, was found to be limited. While some papers suggested that quantitative easing helped create a more accommodative environment for corporate financing and improved the lending attitude of financial institutions, the impact on economic activity and inflation was small (Ugai 2007). The reason commonly cited was the impaired credit channel due to a weak banking system after the crisis of the late 1990s and corporate deleveraging (Berkmen 2012). Besides the credit channel the BOJ managed market expectations very poorly from 1998 to 2003, compromising any potential for success (Mishkin 2004) so, at the end, in 2006 this policy was abandoned.

The adoption of this regime again, was started after 2008 financial crisis. The first central bank conducting this instrument after BOJ, was FED. Federal Reserve System used QE policy three times. The first, that is, QE1 was undertaken to provide stimulus to the economy right after the credit crises of 2008. The second round of stimulus or QE2, was initiated in the fourth quarter of 2010 in order to jump-start the sluggish pace of economic recovery in the U.S. This was followed by a round of operation twist in 2011, whereby the Fed purchased long-term bonds and sold short-term bonds, which helped in extending the average maturity of the Fed's own portfolio. This was an attempt similar to QE, without printing more money, and also, without expanding the Fed's balance sheet, and hopefully avoiding the inflationary pressure associated with QE. Subsequently, a third round of QE was undertaken by the Fed in the fourth quarter of 2012.

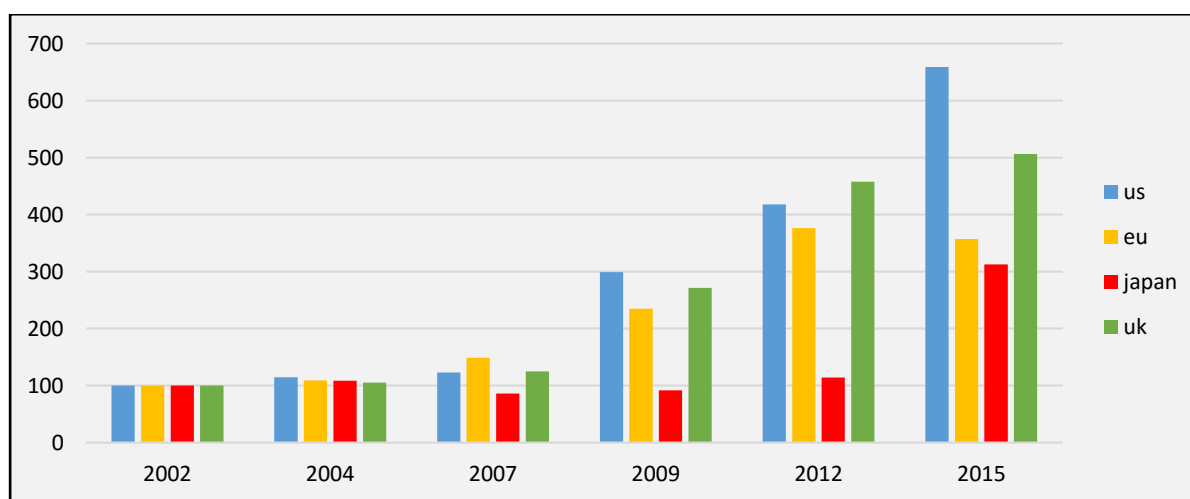


Diagram 3. Central bank balance transformation by Country. The amount of assets, holding central bank in 2002 equals 100<sup>6</sup>. (Source: FED; ECB; BOJ; BOE)

This instrument was conducted by BOE from 2009, and in 2010 it was adopted second times by Bank of Japan. In the first quarter of 2015 QE program was announced by ECB and Sweden Central Bank. The consequence of unconventional monetary policy as central bank balance transformation for 4 major central banks of the world is shown on Diagram 3.

According to the data after financial crisis central bank balance was significantly transformed. Namely, FED, BOJ and BOE balances were extended with long-term bonds. As mentioned above, according to “the quantitative theory of money”, the first effect of this tool is the provision of economics with liquidity, and after the crisis monetary base was really increased. By 2015 US monetary base was almost six times as much as before crisis, fourth times as much as before crisis in Japan, three times as much as before crisis in EU, and twice as much as before crisis in UK.

<sup>6</sup> ECB announced its large scale asset purchase program in March 2016 but it has started lending of unlimited funds at the fixed rate from October 2008 so its balance was extended partly with short term assets

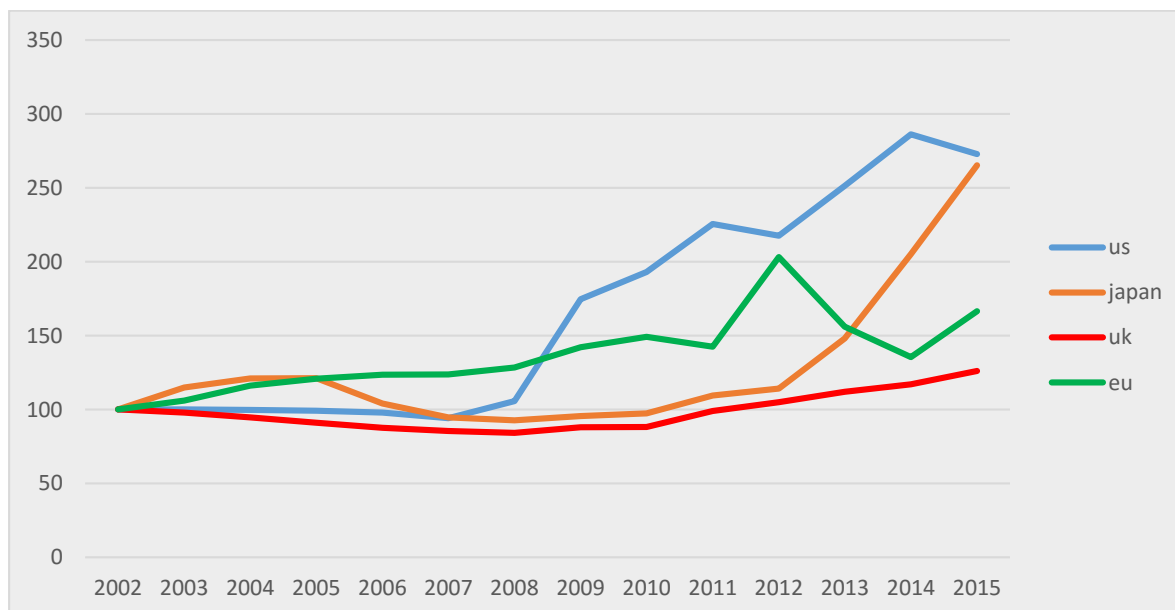


Diagram 4. M0 Index growth /M2 Index growth (Source: FED; BOJ; BOE; ECB.). The amount of money (both: M0 and M2 aggregates) emitted by central bank equals 100 in 2002

But there is one important thing to be pointed out, namely, the ratio of M0 growth rate to M2 growth rate is on upward trends which means that most of the money emitted by central bank is not loaned out by the financial system (Diagram 4)

Besides liquidity provision, long-term asset purchase program pressures on long-term interest rates. Several event studies have shown that the announcements of large-scale bond purchases by central banks in Japan, the United Kingdom and the United States have indeed lowered long-term rates. (Turner, 2014 ) As the empirical evidence shows, after QE there was a sharp reduction in 10 year government bond yields. (Diagram 5).

Another unconventional instrument taken by central banks is negative interest rates on excess reserves. This instrument is used against the deflationary risks<sup>7</sup>. Under this instrument central bank charges commercial banks for holding liquidity above required rate. The main objective of this tool is stimulating lending to economic. The result of this policy according to “the quantity theory of money” is increase in price level or/and output level. By 2016 this tool uses:

- Sweden Riksbank
- ECB
- Bank of Japan
- Danmarks Nationalbank
- Swiss National Bank

From this list, Sweden Riksbank, ECB and BOJ started to use this tool for above mentioned purpose and last two central banks – for prevention of currency appreciation<sup>8</sup>.

<sup>7</sup> For example according to Stefan Ingves (chairman of Sweden Riksbank) negative interest rates were set because of deflationary risks. In January of 2016 BOJ said the same about setting interest rate at -0.1 level.

<sup>8</sup> Against currency appreciation SNB also uses “Large Scale Foreign Currency Purchase Program”. By 2015, 90% of SNB’s balance consisted of foreign currency.

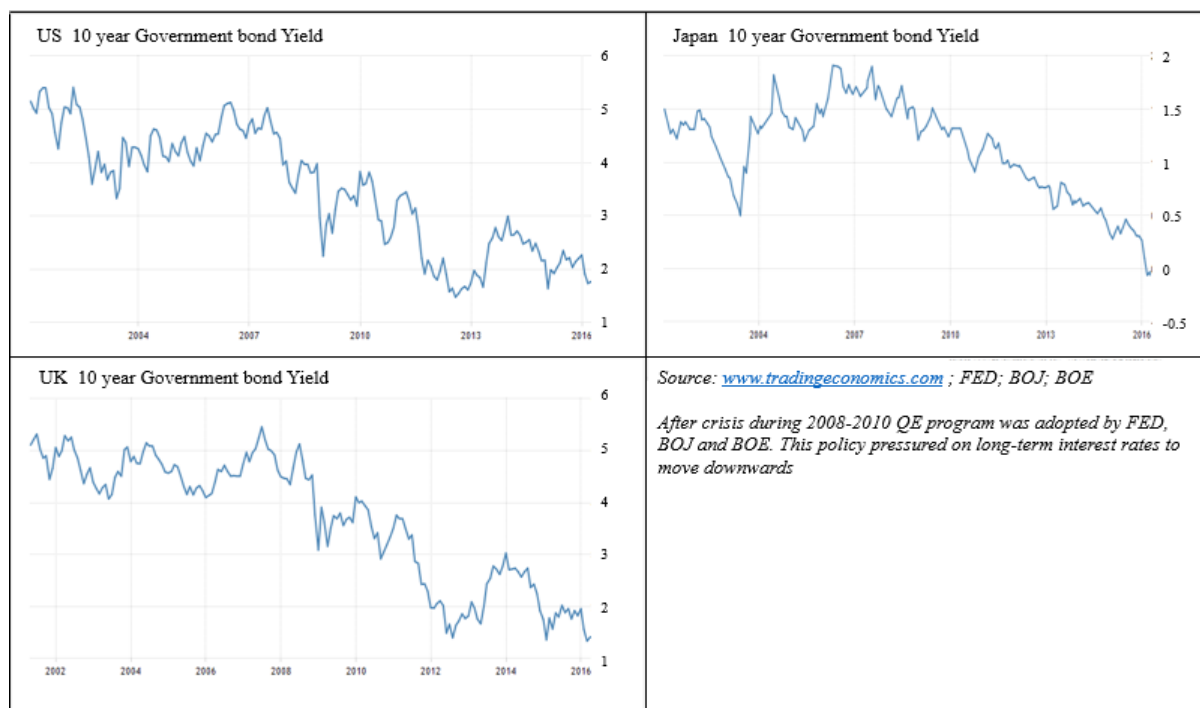


Diagram 5. Long-term bond yields by country (Source: [www.tradingeconomics.com](http://www.tradingeconomics.com))

As this tool is newly adopted, the effects of it on economics, cannot be proved with empirical evidence but theoretically there are some risks in using it. Most of economists are skeptical to negative interest rates because this tool makes financial system to lend the whole excess reserves which may stimulate risky credits, and as a result cause the creation of bubble<sup>9</sup> (see for example: Ermotti 2016; Bech and Malkhozov 2016).

As for QE, the effects of this tool is much more uncertain. According to the vice president of African development bank Mthuli Ncube, the results clearly show that the unconventional monetary measures are effective policy options in supporting price stability. Inflation in the major economies would have been lower or more negative if the unconventional monetary policies had not been undertaken by their Central Banks. The unconventional monetary policies to some extent also have a positive influence on industrial production in the USA, the UK, and Japan. In addition, QE contributes to a reduction in unemployment in the USA and Japan, and a rise in inflation expectations in the USA, the UK, and Euro Area. However, It seems that monetary policy alone is not enough, without some structural reforms and other policy measures. (Mthuli Ncube, Kjell Hausken 2013)

Unconventional monetary policy such as large-scale asset purchases give central banks effective instruments when the traditional policy interest rate is near zero. The Fed and other central banks have been actively using these policies. In the United States, these policies have had meaningful effects on longer-term interest rates and other financial conditions. The precise impact on unemployment, GDP, and inflation is harder to determine. But the available evidence suggests they have been effective in stimulating growth without creating an undesirable rise in inflation. (John C. Williams, 2012)

According to our analysis monetary base and its ratio to broad money aggregate such as M2, was significantly increased within large scale asset purchase program but inflation is still low. Economists such as John Taylor says that this fact creates much unpredictability (Taylor; 2012) Since the increase in bank reserves may not immediately increase the money supply if held as



excess reserves, the increased reserves create the danger that inflation may eventually result when the reserves are loaned out.

The proliferating research on the effects of QE generally indicates that it had the desired effects on asset prices but the effects on the broader economy are much more difficult to discern because it is not possible to know with any certainty how economic conditions would have evolved without these policies in place. (Fawley and Neely; 2013) Quantitative Easing program may also include long-term risks. One of the risk is its negative effect on such institutions as pension funds because the balance of this institutions consists of mainly long-term bonds and as a result of long-term interest rates reduction, decreases their income. (Firzli 2012)

#### 4. CONCLUSION

Empirical evidence shows that within inflation targeting framework, central banks have achieved success in price level stabilization from 1990s. Some countries successfully used this regime to contribute disinflation process. Till 2008 dynamics of inflation and its deviation from target was mostly depended on numerical size of the inflation target. As for regulation, main instrument was the short-term policy rates.

In spite of the success of this regime against inflation, situation was changed after 2008 financial crisis. From this period most developed countries stood against deflationary pressure instead of inflation and existing traditional monetary framework and its tools become powerless. Despite sharp reduction in short-term interest rates, deflationary pressure wasn't reduced and monetary policy get into "the liquidity trap".

At zero lower bound interest-rate condition, central banks were to start adoption of unconventional monetary policy tools. One of the most powerful unconventional tool, used from this period is large scale asset purchase program which had important influence on long term interest rates. Despite positive effects of this tool, there are some uncertainty about its negative effects in the future. Another unconventional tool is the negative interest rates on excess reserves. This tool makes commercial banks to loan out all their excess reserves. On the one hand, it may cause economic stimulation but it also consists of serious risks of creation bubbles. The overall effect of these two policies must be much important.

As for the inflation targeting regime, it may say that after financial crisis it was much transformed. In particular, after the crisis, leading central banks operate within "the quasi inflation targeting" regime that means setting the target point of inflation and trying to stabilize actual inflation around it by using above mentioned untraditional monetary tools instead of short-term interest rates. These unconventional monetary tools makes inflation do not deviate far from the target in spite of the deflationary pressure.

Alongside "the liquidity trap", the most important problem across the world developed countries, there are another thing being discussed among economists. This is the numerical size of inflation target. After financial crisis it got clear that low inflation target means low inflation expectation which do not let central banks reduce in real-interest rates significantly. But as we saw above, there are strong relationship between the size of inflation target and the deviation of actual inflation. So, there are clear choice for central banks: rising their inflation targets at the expense of higher and more unexpected actual inflation or maintain it which makes nominal interest rates less powerful against cyclical fluctuation.

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## UNIQUE INNOVATIVE INFRASTRUCTURE – START-UP OF THE INNOVATIVE TECHNOLOGY PROCESS IN CZECH REPUBLIC - (EXAMPLE OF THE SOUTH MORAVIAN REGION)

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### **ABSTRACT**

*Over recent years, unique innovation infrastructure has been developed in the South Moravian Region which has no equal in the CR and Central Europe. The South Moravian Region sets an example of cooperation between all stakeholders – public administration, regional development agencies, universities, research institutions in line with the government policy and EU policy. The objective of this paper is to assess the structure of innovative technologies developed in the South Moravian Region, introduce the time evolution of the entire process, draw attention to the uniqueness of this model, assess the rate of benefits for the South Moravian Region and draw attention to future risks.*

**Keywords:** *regional development, public administration, innovation infrastructure, innovative technologies, public finance*

### **1. INTRODUCTION**

The last decade of the last millennium triggered a period of enormous technological boom. Innovation processes entered all walks of life. The innovation processes have become part of everyday life and are present all areas of the life of the society. Wildmannová and Venclík write, innovation processes have become the principal driver of economic growth and it is only through rapid innovation that competitiveness advantages in today's global world are maintained (2015).

If a state, public administration and their national economy as a whole are to succeed in the current competitive market, they must be able to keep track of all the changing trends and be ready for these changes. In the third millennium, a system has been set up according to which businesses are not able to succeed in the market without public fund support. The task of public administration is to set conditions for cooperation with the business environment, set the trends and change them if needed. This allows the key entities (public administration, business sector) to take advantage of all the challenges and opportunities available in a given place and time (especially opportunities for cooperation and drawing of financial subsidies from the EU). It is true that there is a direct link between innovation, policies, economy and social policy. A necessary, but not sufficient, condition for innovation is highly educated and practically trained human potential. These relationships can be expressed within the following context:

- a) the state as the supreme body with legislative powers regulates all actions via public administration and public funds

to ensure effective use of funds it is necessary to use planning tools and develop strategies

the following is established on the basis of these processes: state-owned enterprises and state strategy - promoting of science-research-innovation, energy strategy, etc.

the basic tool for the development of the society at all levels is innovation and innovation processes, which qualitatively change the society 5)  
the process of innovation in terms of economic impacts: it starts by combining all factors of knowledge economy and ends by successful capitalisation in the market  
the driver of the innovation processes are power-political interests, competitively - economic interests and the natural evolutionary process of extending human knowledge and the social knowledge.

Based on the knowledge of these processes, factual and efficient forecasting of the technological future can be made. Based on these described processes Venclik and Placek define that the "innovation cycle is a process that is infinite in a well-functioning society". The duration of each innovation cycles is determined by supply and demand. Innovation is the initiator of economic growth and ensures regional or global competitiveness (2015).

## **2. OBJECTIVE OF THE PAPER, METHODOLOGY**

The objective of this paper is to introduce the structure of innovative technologies developed in the SMR, highlight the uniqueness of this model, assess the benefits for the South Moravian Region and draw attention to future risks. The paper is based primarily on statistical data from the Department of Regional Development of the South Moravian Region, direct interviews with the management of the specific innovation institutions and co-authors of the innovation infrastructure in South Moravia. In 2013 – 2015, the Brno Innovation Centre implemented the project "Innovation in Practice", which introduced the technology transfer, innovation transfer, developments and opportunities for future cooperation in the development of technological infrastructure.

## **3. RESULTS**

After the establishment of the SMR in 2000, the public administration started developing basic strategic documents at the regional level. The Department of Regional Development of the South Moravian Region was established and cooperation with very well-functioning Regional Development Agency and the Department of Strategic Development of the City of Brno started developing. An excellent team of experts in the field was thus set up. These people developed the basic strategy in the field of promoting science, research and innovation in the SMR, which had a long-term nature with the definition of individual stages and implementation of individual goals. This strategy was in line with the EU strategy on financial support, which was in line with the EU strategy on financial support and which was allocated as in the past. Several years before accession to the EU, the expert group in the Regional Development Department of the South Moravian Region worked on creating a suitable environment in the region. It was necessary that it should be compatible with the environment to be entered into in the coming years. It was about modelling new thinking of the staff and new directing of creative activities. It was therefore necessary to develop supporting infrastructure and train human resources to be able to perceive and implement the new EU reality. This gave the South Moravian Region a head start ahead of other regions which were not concerned with the topic at that time. A series of analyses confirming the correctness of this path was conducted. The analyses clearly confirmed the scientific and innovative potential of the region: it is the home to six state universities, many branch offices of the Academy of Sciences (AoS) and other research

activities. The universities concentrate a large number of students (depending on the period, from 70,000 to 100,000). The region has also its industrial past and the future, which means qualified manpower. In the South Moravia Region, mainly in Brno, there is strong presence of energy-related, engineering and IT industries. Brno is very well located: within a distance of two hundred kilometres there are three capitals - Prague, Bratislava and Vienna (all cities with airports). Except for the Brno - Vienna route, all these cities are connected by motorways. It features non-profit, business sector and non-profit self government. The innovation structure of the South Moravian Region includes the following institutions which were active at that time or were established:

*Table 1: Innovation infrastructure of the institutions in the South Moravian Region (author)*

	Tasks, objectives	Founded by
Regional development strategy (RRA)	Strategies  Design and specialist support  Project implementation	South Moravian Region  Chambers of Commerce  Syndicate of towns and municipalities c
South Moravian Innovation Centre (JIC)	Provision of public services in the field of innovation strategies in the SMR  Development of basic strategies  Formation of innovations processes in the SMR  Basic communication in the system  Operation of incubators	1st step: SMR, Statutory City of Brno, Masaryk University, Brno University of Technology  2nd step: joined by Mendel University, Veterinary University*
South Moravian Centre For International Mobility (JCMM)	Support for researchers, students and graduates.	SMR, MU, VUT
Tourist Authority South Moravia (CCR)	Promote the SMR and all activities in the region and make the region visible  (marketing company)	SMR, Statutory City of Brno, Confederation of Industry of the CR

\*3rd step (was under preparation – not implemented): AoS and economic administration

The basic strategic document of the region related to the provision of grants in the field of science, research and development in this planning period, i.e. 2014 – 2020, is the Regional Innovation Strategy (RIS) in the relevant region. In the SMR, this document has been developed until 2000. The document is valid for four years and then updated.

Brief evolution of processes in the SMR inked to the national level. This evolution can be divided into three stages:

#### **Stage- start (RIS I, RIS II)**

In 2000-2008, the SMR started massive development in science, research, innovation and entrepreneurship. Basic documents required for these processes were drawn up and strategies to start up these processes were approved. Functional excellent workplaces were established, which was a precondition for functioning: incubators, CEITEC, medical research centre ACRC and others. In this period, the SMR was the leader in these processes in the CR. It was also the authority and coordinator of all these activities. That was the reason behind the success of the developed projects.

#### **Stage- implementation (RIS III)**

In 2008-2013, these projects were implemented. Maximum efforts were dedicated to the implementation activities, which is important; however, strategic planning began to stagnate. The active coordination element disappeared, which prevented from synergic effects that multiply the outcomes of these processes as the only way to the future achievement of the expected results. At this stage, the SMR lost its privileged position in addressing this topic in the Czech Republic and due to this passivity it has been outpaced by other region. e.g. the Moravian-Silesian Region.

#### **Stage- implementation RIS IV**

Currently, a major development document of the SMR covering the years 2014 -2017 has been developed. Its aim is to increase the international competitiveness to ensure long-term development and prosperity of the South Moravian Region. Its fundamental vision is to develop innovative potential of the SMR to catch up with the most innovative regions in the EU. It is built upon five pillars.

1. Pro-innovation administration and governance
2. Excellence in research
3. Competitive innovative companies
4. Top European school system
5. Attractiveness of the SMR: talents, innovators, entrepreneurs

The measurable indicators include: the unemployment rate, wage level, intensity of private investment in R&D, number of European Research Council grants (ERC), number of foreign students from OECD countries, household incomes in the region.

RIS 4 was approved at all management levels and will be followed in coming years. It has been selected by the European Commission as the best defined regional strategy, and as such it was the only one in the EU introduced and presented before the European Commission.

#### **4. DISCUSSION**

Despite all the described accomplishment there are some issues must be handled so as to ensure a stable system continue fulfilling its purpose. The greatest problems that occur and will deepen are problems in the field of management, economy, marketing, strategic planning and the problem of a lack of quality human potential.

1. Economic return on the investments is enormously low
2. Sustainability of the existing projects is threatened: inadequate development of related projects, poor HR policy in project management, minimum project marketing, lack of communication, no broader business plan and coordinated activities and inappropriately set projects both in terms of scientific as well as HR potential of the region
3. The scientific environment is not yet able to understand the fact that it operates with public funds with all the consequences arising from this fact
4. Many of the projects did not have a rational basis and will be difficult to meet the mandatory indicators
5. Schools do not produce human resources with adequate scientific potential

The riskiest in these processes in the Czech Republic are the following obstacles: the crucial role must be played by public administration. It must quickly analyse the current issues and set a revised development strategy that will reflect the new socio-economic and political processes taking place in the Czech Republic and the EU. It must develop or revise innovation-related legislation that will encourage the creative environment. This initiative must be assumed by the public body with authority and funds in the minimum necessary extent. Primarily, today it is about authority at this stage, not about funds.

#### **5. CONSLUSION**

Over the years, the SMR has established a unique innovation infrastructure that is unparalleled in the Czech Republic and in Central Europe. The farther we are from the SMR, the more this fact is understood and appreciated. In the past, these strategies were only developed in the SMR and the region thus gained a huge advantage. Currently, these strategies are also developed in other regions, thus reducing the head start.



Successful technology transfer gives businesses access to unique scientific workplaces, laboratories, enables cost savings related to their own research and development, reduction in risk rate in research and general accelerated introduction of new innovations. In social terms, efficient cooperation between research and practice increases the region's competitiveness and the quality of life of local residents, the region becomes more attractive both for top scientists and investors. Wildmannová et Vávrová confirm that new innovation companies are established providing jobs and producing innovative products with higher quality and use value (2015).

This paper is only a partial study dedicated to the development of innovative technologies in the Czech Republic. It is necessary to analyse the future level of benefit of the innovation infrastructure in the development economic and social indicators and assess the status of individual regions in the Czech Republic and subsequently in the EU.

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## THE DETERMINATION OF ECONOMIC LITERACY LEVEL OF FOREST PRODUCTS INDUSTRY MANAGERS: A SAMPLE OF KAHRAMANMARAS CITY, TURKEY

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### **ABSTRACT**

*Each individual, firm or region, with different identities, is located in economy world. The limitedness of access to resources in economy world reveals importance of economic literacy, involving financial literacy. Economic literacy is the ability to identify economic problems, alternatives, costs, and benefits; analyze the incentives at work in economic situations; examine the consequences of changes in economic conditions and public policies; collect and organize economic evidence; and weigh costs against benefits.*

*Forest products industry has an important place in national economy. This industry section presents wide range of outputs such as timber, package, plywood, particle board, fiberboard, paper, parquet, joinery and furniture. With a share percent 1,6% in manufacturing industry, it is ranked 16<sup>th</sup> among subsectors and approximately employs 300 thousand personnel. Moreover its production value is about 4,3 billion dollars.*

*Considering above statements, in this study economic literacy level of forest products industry managers was investigated. The sample of this research consists of 30 managers in Kahramanmaras forest products industry. Face to face survey was used as method. Findings were shown as frequency tables. It was found that 92% of managers consider their income when making installment. Conversely, 20% of these managers can't make comments about currency changes on import and export.*

**Keywords:** *Economic Literacy, Economic Awareness, Economic Knowledge, Forest Products Industry*

### **1. INTRODUCTION**

Economic literacy means that reaching the level of supporter themselves is necessary for youth are at their status as a producer, consumer and financier; better decision making on their future as a citizen, better understanding the world. Economic literacy is ability of measurement of amount response to yield, organizing, aggregation of economic proves, evaluation of results of changes at local politics, analyzation of promotion at working place, describing of prices and their benefits, alternatives and problems originating from economic.

Over the last several years, the issue of financial literacy and financial education has risen on the agenda of educators, community groups, businesses, government agencies, organizations, and policy makers (GAO, 2004; International Monetary Fund, 2005; OECD, 2005).

Financial literacy was defined as the ability to make informed judgments and to take effective decisions regarding the use and management of money( Noctor, et al., 1992). A financially-literate person would enjoy a range of abilities and attitudes comprising(Schagen and Lines, 1996) :

- A range of analytical and synthetically skills, both general and specific,
- A working knowledge of financial institutions, systems and services,
- An understanding of the key concepts central to money management,
- Attitudes which allow effective and responsible management of financial affairs.

Economic literacy is ability of describing for economic problems, different options, cost and profits; researching for results of changing at economic conditions and local politics; collecting and organizing economic data; measuring cost and profit (Gerek and Kurt, 2011).

Economic literacy provides to get some skills for people play role as a producer, consumer, saver, financier and responsible citizen. These skills are decision making, economic reasoning, problem solving, real life states analyzing, understanding and practice for basic economic concepts and principles.

In the light of all these studies, it is possible to describe economic literacy by this means: economic literacy is that the students are equipped with economic knowledge, skill and attitude for producer consumer, worker and financier in reference to their age levels; better decision making as a responsible and hardworking citizens in the future; better understanding themselves and the world.

The American Savings Education Council (ASEC, 1999) found that 15 percent of students said they understood financial matters very well, 67 percent said fairly well, and 18 percent said they did not understand financial matters at all. Similarly, 18 percent thought they did a very good job of managing their money, 38 percent said they did a good job, 37 percent said they did an average job, and 7 percent said they did a poor job.

Reid (2003), at the ASIC Stakeholder Forum in Sydney, highlighted the following areas of concern: bankruptcies, with youth bankruptcies increasing; low levels of national savings; marriage breakdowns, where financial problems are a common cause; crime pressures placed on individuals because they are part of a consumer society; personal hardship from growing consumer debt. Banks, O'Dea and Oldfield (2007) look at numerical ability and other dimensions of cognitive function and find that numeracy levels are strongly correlated with measures of retirement saving and investment portfolios, pension arrangements, and perceived financial security.

Guiso and Jappelli (2008) relate financial literacy to portfolio diversification by Italian investors. They use the 2007 Unicredit Customer Survey (UCS), which has detailed indicators of investors' portfolio choice financial literacy, and demographic characteristics. Financial literacy is strongly correlated to the degree of portfolio diversification, even controlling for other socioeconomic characteristics and proxies for risk aversion. Cole, Sampson, and Zia (2009) analyze the relation between economic literacy and participation in formal financial markets. Using survey data on India and Indonesia, they show that financial literacy is a powerful predictor of demand for financial services.

Forest products industry has an important place in national economy. This industry section presents wide range of outputs such as timber, package, plywood, particle board, fiberboard, paper, parquet, joinery and furniture. With a share percent 1,6% in manufacturing industry, it is ranked 16th among subsectors and approximately employs 300 thousand personnel. Moreover its production value is about 4,3 billion dollars. In this study economic literacy level

of forest products industry managers was investigated. The sample of this research consists of 30 managers in Kahramanmaraş forest products industry.

## 2. MATERIAL AND METHOD

The 30 participants in this study were forest products industry managers in Kahramanmaraş city. The majority of the sample were older than 25 years, educated, currently employed in a professional or administrative role, in the workforce for over 8 years, and living in traditional households as couples with and without children.

The economic literacy test contained five subscales covering the core dimensions of economic literacy. The first subscale (Demographic Characteristics) tapped respondents' demographic characteristics such as gender, age, educated or not, workforce for how many years. The second subscale (Basic Concepts) assessed respondents' understanding of basic concepts such as the effect of interest, inflation, foreign currency. The third subscale tapped (Decisions) respondents' ability to analyze commonly occurring financial scenarios and to choose an appropriate response. The fourth subscale (Public Economy) assessed general issues such as the consequences of competition, economic crisis, advertisement outgoings, the price-profit relation, and the selection of brand or quality. The last subscale (Personal Economy Planning) assessed knowledge of different types of economy planning such as income-expense balance while using credit, the using of credit card, and installment. The dependent variables were the five subscales scores (range 1 to 5).

The survey data was analyzed with SPSS program. SPSS is a widely used program for statistical analysis in social science. It is also used by market researchers, health researchers, survey companies, government, education researchers, marketing organizations, data miners, and others. The frequency tables were used to display the frequency of various outcomes in a sample.

## 3. RESULTS

86.7% of managers who participated into the survey are men, while 13.3% of them are women. When the managers are evaluated to their age group it is observed that the vast majority belongs to the age group of 36-45 (40%). Nonetheless, according to the data, 46.7% of them are high school graduate, 33.7% of them are collage graduate, 13.3% of them are primary school graduate, and 6.7% of them are secondary school graduate. 73.3% of them are in single proprietorship.

Basic concepts about economic literacy have shown at Table 1. 56.7% of manager can understand the effect of international economic sources on market, 53.3 of them can comment the effect of external economic balance on our country, understand the effect of interest rates on market, and the economic roles of small, medium, and big sized enterprises. 16.7% of manager can't comment change currency on export and import.

At Table 2, there are some decisions to analyze the economic scenarios. 53.% of managers can compare benefit and cost of my economic preferences, and evaluate services on offer in terms of economy. 40.0% of them can understand the difference between profit and costs, make out general consumption expenditures as regards my income, and understand that how interaction between producer and consumer reflect on prices. 10.0% of them can't understand that how interaction between producer and consumer reflect on prices. 7.1% of them can't comment goods increasing or decreasing to the effect market prices.

Table 1. Basic concepts for economic literacy (%)

	Strongly Disagree	Disagree Somewhat	Not Sure	Agree Somewhat	Strongly Agree
I can comment change currency on export and import	16,7	3,3	3,3	50,0	26,7
I can discuss the effect of IMF policies on economy	13,3	3,3	13,3	46,7	23,3
I can understand the effect of stock market on economy	13,3	-	16,7	50,0	20,0
I can understand the effect of international economic sources on market	6,7	-	6,7	56,7	30,0
I can understand the effect of national financial sources on economy	6,7	6,7	13,3	46,7	26,7
I can define the change of inflation rates	3,3	-	16,7	50,0	30,0
I can comment the effect of external economic balance on our country	3,3	-	16,7	53,3	26,7
I can evaluate benefit and cost of economic policies	7,0	3,4	-	51,7	37,9
I can understand the effect of interest rates on market	3,3	6,7	6,7	53,3	30,0
I can understand the economic roles of small, medium, and big sized enterprises	3,3	6,7	13,3	53,3	23,3
I can comment the causes of currency and gold prices changes	6,7	-	16,7	46,7	30,0
I can define the economic roles of public, private, and nongovernmental organizations	-	-	13,8	51,7	34,5
I can understand the relation of income distribution-economy	-	6,7	10,0	43,3	40,0

Table 2. Decisions to analyze the economic scenarios (%)

	Strongly Disagree	Disagree Somewhat	Not Sure	Agree Somewhat	Strongly Agree
I can compare benefit and cost of my economic preferences	3,3	6,7	6,7	53,3	30,0
I can make rational choice by evaluating my resources	-	3,3	13,3	30,0	53,3
I can evaluate services on offer in terms of economy	-	-	3,3	53,3	43,3
I can understand the difference between profit and costs	-	3,3	6,7	40,0	50,0
I can make out general consumption expenditures as regards my income	-	-	6,7	40,0	50,0
I can perceive economic factors which effect the behaviors of individuals	3,3	3,3	13,3	30,0	50,0
I can understand that how interaction between producer and consumer reflect on prices	10,0	-	10,0	40,0	40,0
I can comment goods increasing or decreasing to the effect market prices	7,1	-	17,9	35,7	39,3
I can understand that how supply-demand imbalance reflect on prices	-	3,4	10,3	37,9	48,9

General issues about public economy have been showed at Table 3. 60.9% of the managers strongly agree that they can comment the effects of economic crisis on unemployment, and 53.3% of them consider my need while making decision on product. 50.0% of them can understand the economic consequences of competition. 8.7% of them can't comment the effects of economic crisis on unemployment.

Table 3. General issues about public economy (%)

	Strongly Disagree	Disagree Somewhat	Not Sure	Agree Somewhat	Strongly Agree
I consider price-benefit relation while making decision on product	-	3,3	13,3	43,3	40,0
I can understand the economic consequences of competition	-	-	10,0	50,0	40,0
I can comment that advertisement expenditures support on economy	3,3	3,3	20,0	36,7	36,7
I consider my need while making decision on product	-	-	6,7	40,0	53,3
I buy lower another product which has same benefit, if the product's price increases	3,4	-	6,9	44,8	44,9
I look the quality instead of brand while buying a product	6,9	3,4	3,4	37,9	48,4
I can understand that how the process of product to consumers reflect on prices	-	-	6,9	58,6	34,5
I can comment the effects of economic crisis on unemployment	-	8,7	13,0	17,4	60,9

There are some questions about personal economy planning at Table 4. 72.0% of the managers strongly agree that they consider my income while making an installment plan, 60.0% of them spend with respect to ability to pay while using credit card, and 54.5% of them provide income-outcome balance while using credit.

Table 4. Personal Economy Planning(%)

	Strongly Disagree	Disagree Somewhat	Not Sure	Agree Somewhat	Strongly Agree
I provide income-outcome balance while using credit	4,5	9,1	-	31,8	54,5
I spend with respect to ability to pay while using credit card	4,0	4,0	16,0	16,0	60,0
I consider my income while making an installment plan	8,0	-	-	20,0	72,0

#### 4. CONCLUSION

Literacy is a concept that is widely discussed and clearly at the core of understanding economic behavior in modern sciences. According the findings of this study, the managers generally consider my income while making an installment plan (72.0%), comment the effects of economic crisis on unemployment (60.9%), spend with respect to ability to pay while using credit card (60.0%), and understand the effect of international economic sources on market (56.7%). We demonstrate that the managers can do a plan about their economic situation. On the contrary, they can't comment change currency on export and import (16.7%), can't discuss the effect of IMF policies on economy (13.3%), and can't understand the effect of stock market on economy. 20.0% of them are not sure that comment advertisement expenditures support on economy.

We make these points to demonstrate that economic literacy is an aggregate construct. As such, it has many psychological antecedents. Some of these have to do with abilities; others may be attitudinal or based such constructs as interests, values, or personality. We show that there is considerable heterogeneity in literacy levels over economic domains, and across observable demographics.

To conclude, present study represents an initial foray into an area that is certain to capture more attention in the future. Financial difficulties are a fact of life for a significant proportion of the population already, and the proportion is likely to grow. The introduction of a construct such as economic literacy will be helpful only if we understand what is meant by the term.

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## THE POST-INDUSTRY SOCIETY AND TRASFORMATION OF GLOBAL NEWSPAPERS INDUSTRY: THE NECESSITY FOR CHANGE OF PARADIGMS IN THE MANAGEMENT OF CROATIAN MEDIA ORGANIZATIONS

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### ABSTRACT

*The goal of this paper is to show the transformation in the management of global media corporations and global media markets as a consequence of change that occurred in the post-industry society. The digitalization and convergence of the production processes of media companies stepped out of the borders of the modern way of managing systems and erased the firm borders between the production of goods and services. The media product became a content which is distributed and monetized through various platforms. The changes brought by post-modern in the media industry mostly reflected on publishing as the oldest category of the media industry. The management of the publishing industry demanded radical reforms and a complete technological shift. The environment of publishing organizations fundamentally changed in only a few years and the business models based on the large ratio of income from advertising demanded a completely new management approach in managing business processes. The global financial crisis, from the beginning of the 21st century, struck the global media industry and accelerated the redistribution from advertising. The economic crisis on the Croatian market had a drastic reflection on the national publishing industry which resulted in a decrease of readership, publishing and income from advertising. The decrease of income from advertising threatened the daily business activities of newspaper industries and magazine industries. The decreasing income from advertising in magazines, which was the fuel in creating new brands, questioned classic advertising as a tradition to modern advertising. While the global media industry transformed and adapted to the post-industrial production system, the Croatian media industry fell into a modernist sleep.*

**Keywords:** *communication studies, financial management, media industry, postmodern, post-industrial society, publishing*

### 1. INTRODUCTION

In the last twenty years, the global market of printed media has undergone a transformation leading to a fundamental change in technology and business processes within the publishing industry. The innovation of technological processes within the publishing industry is directly reflected on decreased circulation of printed editions. The end of the twentieth century marked the beginning of the end of the exclusive domination of ink and paper. The post-modern and post-industrial society has created a mould for the changes that have sprouted from new technological solutions. The basic catalyst for change was the digitization of business processes that led to the convergence of technological processes within the media industry.



The printing industry experienced its full glory in the mid-twentieth century, at the close of the golden age of modernity. The publishing industry, primarily the industry of newspapers and magazines, largely owes its income from advertising to its high profitability from the middle and the end of the last century. The digitalization of media content production and distribution of printed product have dramatically changed advertising revenues which directly affected the total revenue and profitability within the publishing industry. Postmodern will mark the end of a large number of subjects of the global publishing industry that are not able to adapt to the new production paradigm.

Merriam-Webster Dictionary (Online) determines publishing (printing) as a process of production of books, magazines, newspapers and the like, using the technology of printing or the production process of printing a large number of copies of content. Oxford Dictionaries (on line) expands the definition of publishing, stating that the publishing process is the production of printed materials in large series, which also involves the transfer of texts or images on paper. The publishing industry includes both profit and non-profit organizations involved in the organization of production, distribution and sales of printed content produced in the process, or mass production. The definition of "printing", which would only mark printing on paper media, was expanded with the concept of "publishing" which includes the forms of media circulation.

The digitization and convergence of the media industry has enabled the production and distribution of the same content on different media as carriers of content. In this sense, "publishing" could be determined as production, storage and distribution of digital recordings of different categories of the media industry. The Free Dictionary (online) raises two fundamental approaches to defining the concept of "publishing": a) the preparation and production of various content (music, text, etc.) for public distribution, with an emphasis on sales (monetization) and; b) the editing and processing of ready-made content by the author or other authorized person. This paper will shift the focus to the publishing industry of printed media, focused on news production.

Publishing as a business-oriented production of printed materials with an emphasis on books, newspapers and magazines, is more than five hundred years old. In the article *Technology and Death of Print Media*, dated 08 January 2012, published on Investopedia.com, Gregor McFarlane warns that publishing will soon be "deader" than Rasputin. The legend of Rasputin, the Russian hero of dubious skills and human qualities, has survived centuries because of the story of his death and the process of killing that lasted for hours. Referring to the death of Rasputin, who according to legend came back from the dead several times when he was killed, McFarlane points out that the publishing industry is frantically struggling while technology and new technological solutions change the fundamental characteristics of the original publishing industry.

Two years before that, in August 2010, Christopher Mims at MIT Technology Review published the article *Predicting the Death of Print*. The article refers to a statement by Chris Anderson, editor of *Wired* magazine, issued by *The New York Observer* in 2008, on how the publishing industry will be completely change by 2018. According to the editor of *Wired* magazine, the biggest change will be experienced by newspapers that will almost completely abandon the technique of ink and paper, while magazines cannot expect such a rapid change because of the entrenched habits of readers. The editors of *The New Yorker*, *Rolling Stone* and *US Weekly* had a similar claim. Already after five years, the magazine industry completely moved to digital editions, and without that, business with a subscription was impossible.

The assumption of the "death" of publishing activities was based on the increasing digitization of production and the tendency of decrease in the circulation of printed editions produced by the technique of ink and paper. During 2010, the first sounds of the end of classic book publishing were heard. Nicholas Negroponte, at the Technomy conference, regarding the future of technology, suggested a radical change and the beginning of the end of classic book publishing. The situation was compared with the changes that the music and film industry experienced which completely transformed and adapted to new media. Solid media that we knew as children completely disappeared from use.

Already long before 2018, "Kindle" editions completely covered the book market, digital subscriptions for daily and weekend newspapers have changed the world of reporting, and smart phones and tablets have enabled monitoring of news and information at all times. The industry of books, as well as the library culture, has dramatically changed in the method of storage and access facilities. Classic print publishing is not dead as Rasputin, but it is experiencing radical changes.

## **2. OVERVIEW OF LITERATURE**

The media industry is not monolithic but rather a conglomeration of different industries that have the creation of mediated content as a common activity. These sectors are constantly evolving (Kung 2013: 17). Publishing is the oldest segment of the media industry, a heritage tradition of more than 500 years. Since its inception in the 15th century, up until the early twentieth century and the emergence of radio and soon film and television, publishing was the initiator of the media industry. We could conclude that Gutenberg's invention of the printing press set the fundamentals of the publishing industry, but the media industry was created through the synergy of publishing and advertising revenues in the media.

The particularity of the media industry is recognized by its close connection with advertising and advertising revenues. Picard (1989: 17) was the first to mention the term "dual product" markets, which highlights the dual character of media products. The media product is aimed towards monetization on the market, but also towards the market of advertisers. In this sense, Doyle (2013: 13) extends the definition of the term "two-sided markets" by defining media output as a product that is also sold in two directions in the market. The specific characteristic of media enterprises consists of the fact that they sell their services not only in one, but two business markets simultaneously. The services that media enterprises provide usually take the form of a service package of information and entertainment on the one hand, and advertising space on the other. Both these partial services are traded on different markets but they are both related to the same target consumer markets (Wirtz 2011: 28).

Advertisers are critical to the success of commercial media because they provide the primary revenue stream that keeps most of them viable. Broadcasters, trade magazine publishers, and newspapers publishers exhibit the highest level of dependence on advertising income among media firms (Picard 2011: 139). Printed publishing has become the most vulnerable to changes in the environment. With the development of digital media, primarily television, and then the development of the Internet, the revenue of advertising in the print media began to fall sharply. Bagdikian (2000: 121) stressed that mass advertising has been a major contributor to the drastic shrinkage in shares of sales by small, local businesses and has helped large national and multinational corporations achieve market control and political power. With the advent of new media, advertisers were directing resources towards technologically developed media forms. Journalism and magazines were critical in the creation of corporations and brands. With the

development of technology, the newspaper industry was forced to turn a new page in historical development in order to survive within the media industry.

### 3. HYPOTHESES:

The journalism industry is passing through a detailed transformation of the business model by focusing on an increase of income from digital editions.

The journalism industry in the Republic of Croatia did not develop the capacity for monitoring global trends which occur in the newspaper industry.

### 4. CONVERGENCE OF PUBLISHING AND THE POST-INDUSTRIAL SOCIETY

It is a fact that the new network citizen is not interested too much for the old and worn rituals of capitalist paradigm, such as, for example, political elections, is therefore not too strange. The audience simply got up from their chairs and left the theatre. The old capitalist was left on the stage, wondering more and more often why nobody is listening to his words of wisdom (Bard, Soderquist 2003: 206). Already at the beginning of the century it was clear that the old paradigms are changing, and the digitization of all pores of social life is radically changing the way of gathering information in the post-industrial society. The classical paper newspaper, as a form of information in the modern age, bent under the stormy winds that arrived with postmodern.

Table 1 Global publishing market category segmentation: \$ bill. 2010 – 2014.

Global publishing market value: \$ 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%	6,7%
Newspapers	126,0	124,7	<b>-1,0%</b>	121,2	<b>-2,8%</b>	118,3	<b>-2,4%</b>	115,9	<b>-2,0%</b>	-8,0%
Magazines	68,5	68,6	0,1%	68,2	-0,6%	66,4	-2,6%	66,4	0,0%	-3,1%
	<b>312,5</b>	<b>313,3</b>	0,3%	<b>311,2</b>	-0,7%	<b>308,5</b>	-0,9%	<b>308,2</b>	-0,1%	<b>-1,4%</b>

Source: Business Source Complete (own illustration)

Digitization and development of the Internet were changing the habits of information more and more. Even the television as the dominant form of media industry could not afford a break from change and convergence in the media market. It was conveniently, but also figuratively noticed by Low (2013: 17) that we evolved naturally and casually made a huge step forward. The importance of the Internet in our lives simply dropped to the initial step of Maslow's scale of needs. While in early capitalism and modern time the lowest hierarchy of needs include biological needs with the needs of safety and survival, postmodernism moves the bar up and the Internet becomes the primary need.

Within the media industry, changes in the social paradigm hit classic publishing the most. Table 1 shows the overview of the global publishing industry in the period from 2010 to 2015. In the analyzed period, the total revenue of the global media industry fell an average 0.3 percentage points per year. The total global revenue of 312.5 billion dollars recorded in 2010 fell to 308.2 billion in 2014. The total decline in revenue was 1.4 percent at the global level. Within the publishing industry, the biggest decline in revenue was generated by the newspaper industry. At the global level, the decline in the analyzed five-year period was 8 percent. The fall in revenues of magazine was slightly lower and amounted to 3.1 percent globally.

## 5. CHANGES OF PARADIGM WITHIN THE ADVERTISING INDUSTRY

Traditional marketing — including advertising, public relations, branding and corporate communications — is dead. Many people in traditional marketing roles and organizations may not realize they're operating within a dead paradigm. But they are. The evidence is clear (HBR: 2012). The claim of "death" of traditional marketing was announced by Bill Lee in Harvard Business Review in August 2012. However, this situation has been quite obvious for many years. Classic marketing, and within that advertising, was in the process of complete transformation. Picard's "dual-product" market already experienced adaptation to new environmental conditions.

As a result of the changes brought by postmodern, there was a completely new approach to the advertising philosophy. From segmentation and market orientation to focus groups, advertising turned towards individuals. The culture of advertising, by using mass media, gave up its dominance to directly addressing individuals. The process of adaptation of the advertising industry started already in the sixties, at a time when television began to take over complete dominance on the media market. Bagdikian (2000: 14) stressed that magazine of general interest (Life, Look, Saturday Evening Post, etc.) died in the 1960s when the advertising power of colour television replaced them, but specialized magazines, including those devoted to women, remain profitable.

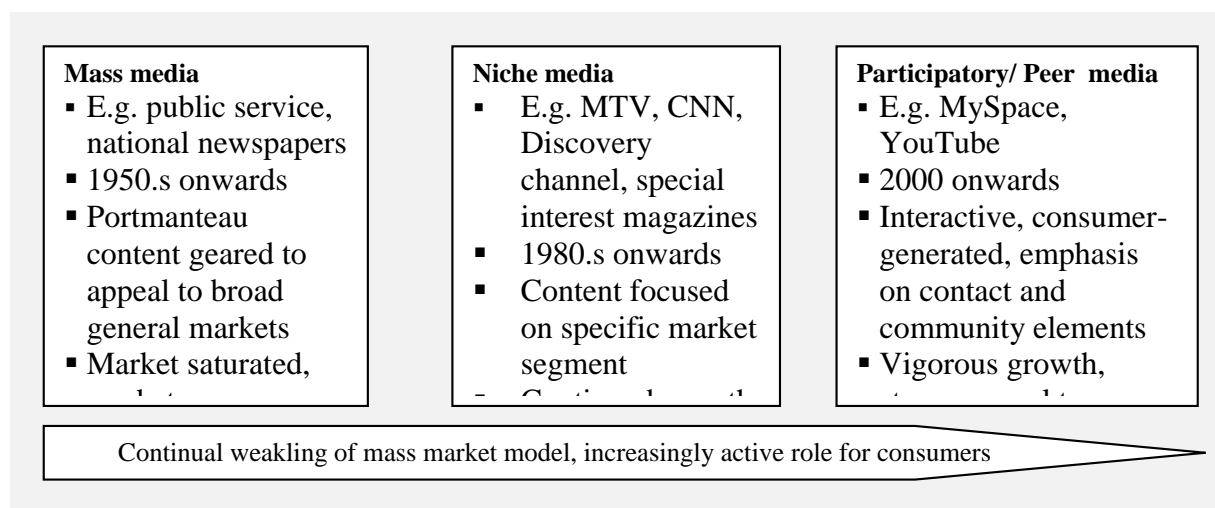


Figure 1: Evolution of media content models  
Source: Kung, 86, 2013

One upon a time, you selected your target audience and than found the right medium to connect with them. But does Amazon target in this way? Does Amazon has created an online process that makes purchasing a large number of items effortless (Low 2013: 88). It is obvious that the system of using mass media and focusing on large and homogeneous audiences dwindles the proportional flight of digitized media. With the introduction of the Internet in every "telephone jack" in the world, McLuhan's assertion of the global village was confirmed. Internet is different from mass media from the later of the capitalist era in one key point. Daily newspapers, radio and television, are examples of one-way communication. The consumer consumed, while the transmitter peacefully sent his message (Bard, Soderquist 2003: 205). The changing in the direction of communication, from one-way to network communication, was a libretto in the completely new chapter of marketing and advertising in the postmodern.

The process of liberalization of the market of the 1980's also left a permanent mark on the culture industry, which permanently became the media industry. The fundamental factor that

will mark this change is the commoditisation of media content that is exchanged in the market as a commodity. Benjamin will talk about the technical reproducibility of artistic work, and through further development of the process, the term of copy-paste culture will be devised. Hesmondhalgh (2013: 127) referred to the changes that have occurred in that period, calling them "marketization". In accordance with the increased weakening of the model of mass communication and the strengthening of the role of the ultimate audience, the strategy of media organizations has changed. The strategies of mass communication and mass media of the 1950's turned to niche markets in the 1980's and in the 2000's they brought complete orientation to individual customer. Figure 1. In that context McGuigan stressed that the moment of postmodern culture is one of an accentuated consumerism when personal identity is constructed what one buys and intense commoditization leaves no aspect of life untouched, increasingly at a global level (McGuigan 2006: 96).

## **6. FROM THE NEWSPAPER INDUSTRY IN US TO THE GLOBAL TREND**

According to the data in Table 1, the revenues from the sales on the global market in the period from 2010 to 2014 decreased by 8 percent. Compared with other segments of the publishing industry, newspapers recorded the highest rates of decreased revenues. The newspaper industry recorded its golden period in the mid and late twentieth century. Since the 1960's, large corporations from other industries buy news organizations, and the race to increase profit begins. Circulation increases, readership grows and profit margins reach historic heights.

Modern, and after that early capitalism as well, was born in Europe but it soon spread to the United States. The development of industrial society and post-modern was with the reverse matrix direction. Beginnings were created in the United States, and then spread to the west. The news industry developed in the lee of the capitalism era of industrialization and urbanization. Changes proposed in the post-industrial era reflected on the newspaper industry through a process of decline in print circulation. By analyzing the publishing market, there are clearly visible differences that are associated with certain social processes. While in the West, particularly the United States, there is a slow death of print editions of newspapers and magazines, the east global market discovered industrialization, some kind of late modern and an increase in newspaper circulation.

Table 2 shows data on actual revenues in the newspaper market of the United States for a period of 12 years. We analyzed data for the period from 2000 to 2012. Revenues of the newspaper industry of the United States grew to 2003 and in 2004 they first recorded an average revenue decline of 2 percentage points. In the period of revenue growth from 2000 to 2003, revenues grew at an average rate of 2.33 percentage points per year. In comparison of 2003 with 2000, the growth was 7.2 percent. If revenue growth discounted the rate of inflation, there would be a result already showing a declining trend of revenues below the inflation rate.

*Table following on the next page*

*Table 2. Newspapers: Circulation Revenue 2000. – 2013. (in thousands)*

Newspapers: Circulation Revenue (USA)						
Year	Daily	%	Weekend	%	Total	%
2000	6.507.803	-	4.032.840	-	10.540.643	-
2001	6.689.745	2,8%	4.093.333	1,5%	10.783.078	2,3%
2002	6.830.230	2,1%	4.195.666	2,5%	11.025.896	2,3%
2003	6.974.530	2,1%	4.249.832	1,3%	11.224.362	1,8%
2004	6.832.315	-2,0%	4.156.336	-2,2%	10.988.651	-2,1%
2005	6.729.830	-1,5%	4.017.071	-3,4%	10.746.901	-2,2%
2006	6.665.802	-1,0%	3.892.542	-3,1%	10.548.344	-1,8%
2007	6.519.154	-2,2%	3.775.766	-3,0%	10.294.920	-2,4%
2008	6.401.810	-1,8%	3.685.147	-2,4%	10.086.957	-2,0%
2009	6.389.006	-0,2%	3.677.777	-0,2%	10.066.783	-0,2%
2010	6.382.617	-0,1%	3.666.744	-0,3%	10.049.361	-0,2%
2011	6.344.321	-0,6%	3.644.743	-0,6%	9.989.065	-0,6%
2012	6.636.160	4,6%	3.812.401	4,6%	10.448.561	4,6%
2013	n/a	-	n/a	-	10.870.000	4,0 %
Average	-	<b>0,2%</b>	-	<b>-0,4%</b>	-	<b>0,0%</b>
2012 vs 2000	<b>2,0%</b>	-	<b>-5,5%</b>	-	<b>-0,9%</b>	-

*Source: PewResearchCentar, Journalism and Media (own Illustration)*

2004 marked the final milestone in the newspaper market in the United States because the income from sales began to decline. The downward trend continued until 2012, when the newspaper market again began to recover. The growing market of digital editions of newspapers had great merit in the change of the trend. In the analyzed period, revenues from the sale of daily newspapers grew at an average rate of 0.2 percentage points per year, revenues from the sale of weekend newspapers fell by an average rate of 0.4 percent per year, which would together make a change of income of 0 per cent, and this is far below the discounted rate of inflation. Comparing the change in revenue at the end of the analyzed period compared to the initial period income from the sale of daily newspapers increased by two percent, revenues from the sale of the weekend editions decreased by 5.5 percent, making a total decline of 0.9 percent.

The results of the analysis of the print edition are shown in Table 3. While revenues had more positive signs by 2003, circulation in the US market was falling even in the last century. In the analyzed period from 1990 to 2014, circulation fell at the rate of an average of 1.4 percentage points with daily newspapers and 1.1 percentage points with weekend editions. The total decline in circulation of daily newspapers accounted for 29.2 percent and in weekend editions 23.5 percent.

*Table following on the next page*

*Table 3. Newspapers Circulation 1990. – 2014.*

Newspapers: Circulation by Publication Type (million units) (USA)				
Year	Total Daily	%	Total Weekend	%
1990	62,3		62,6	
1991	60,7	-2,6%	62,1	-0,8%
1992	60,2	-0,8%	62,2	0,2%
1993	59,8	-0,7%	62,6	0,6%
1994	59,3	-0,8%	62,3	-0,5%
1995	58,2	-1,9%	61,2	-1,8%
1996	57,0	-2,1%	60,8	-0,7%
1997	56,7	-0,5%	60,5	-0,5%
1998	56,1	-1,1%	60,1	-0,7%
1999	56,0	-0,2%	59,9	-0,3%
2000	55,8	-0,4%	59,4	-0,8%
2001	55,6	-0,4%	59,1	-0,5%
2002	55,2	-0,7%	58,8	-0,5%
2003	55,2	0,0%	58,5	-0,5%
2004	54,6	-1,1%	57,8	-1,2%
2005	53,3	-2,4%	55,3	-4,3%
2006	52,3	-1,9%	53,2	-3,8%
2007	50,7	-3,1%	51,2	-3,8%
2008	48,6	-4,1%	49,1	-4,1%
2009	45,7	-6,0%	46,2	-5,9%
2010	43,4	-5,0%	44,1	-4,5%
2011	44,4	<b>2,3%</b>	48,5	<b>10,0%</b>
2012	44,3	-0,2%	48,8	0,6%
2013	45,6	2,9%	49,6	1,6%
2014	44,1	-3,3%	47,9	-3,4%
	Average	<b>-1,4%</b>		<b>-1,1%</b>
	2014 vs 1990	<b>-29,2%</b>		<b>-23,5%</b>

*Source: PewResearchCentar, Journalism and Media (own Illustration)*

Figure 2 shows trends in circulation of daily and weekend editions in the United States according to semi-annual periods. The analysis of revenues and circulation in the newspaper market in the United States shows that circulation began to decline sooner than the decline of income and that the overall relative decline in circulation was much higher than the overall relative decline of revenues. Total revenues showed positive trends in 2012, but in 2013 they were already weaker than in the previous year. Circulations were declining for many years and 2011 and 2013 showed signs of recovery but 2014 again continued with negative trends.

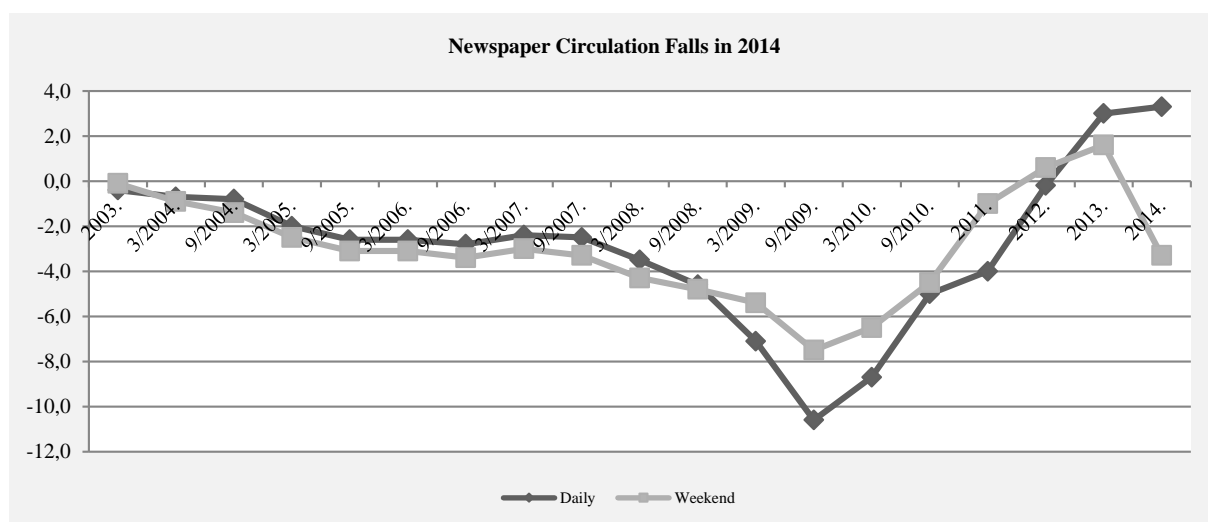


Figure 2: Newspapers circulation in USA

Source: PewResearchCenter, Journalism and Media (own Illustration)

## 7. FROM ADVERTISING IN THE NEWSPAPER INDUSTRY TOWARDS THE TREND OF GLOBAL DIGITAL ADVERTISING

Already the mid-twentieth century proved how the publishing industry is important revenues from ads. In 1966 The New Yorker sold 6.100 pages of ads. In circulation was at its usual level, around 448.000. In 1967 a strange disease struck. The New Yorker's circulation remained the same but the number of ad pages dropped disastrously. In a few years 2.500 pages of ads disappeared, a loss of 40 %. The magazine's net profits shrank from the 1996 level of \$3 million to less than \$1 million. Dividends per share, \$10,93 in 1966, were down to \$3,69 by 1970 (Bagdikian 2000: 106).

Table 4 gives an overview of the advertising revenue the newspaper industry in the United States between 2003 and 2014. According to the share of income, which is divided into advertising revenues in magazines and advertising revenues in digital editions, the dominant part is held by revenues from printed editions. Total advertising revenues grew until 2005 and subsequently fell from year to year. The highest rate of decline was recorded in 2009, and the decline was 27.2 percentage points compared to the previous year. The period of the mortgage crisis of banks had devastating effects on the industry of advertising associated with the newspaper industry. Total advertising revenue fell at an average rate of 7 percentage points a year, while in 2014 they were lower by 56.9 percent than in 2003.

Analyzing revenues from print ads, their decline was larger than the average of the total decline, and revenues fell at an average rate of 8.4 percentage points per year. The total decline in revenue from print ads was 63.6 percent. Revenue from digital advertising grew until 2007, and then in 2008 recorded a drop of 1.8 percentage points compared to the previous year. Upon the completion of the "mortgage" crisis in the United States, revenues from digital advertising slowly started recovering, but never again returned to the growth rates before the crisis. The overall average increase in advertising revenues in the analyzed period was 10.9 percentage points per year, or an increase in revenues of 188 percent.

Advertising revenues in the newspaper industry are divided into three basic categories: retail, national and classified. By analyzing the distribution of income within the basic categories in the period from 2003 to 2013, the biggest drop was recorded with classified ads, which fell at an average rate of 11.5 percentage points a year. National ads were falling at an average rate of



8.6 percentage points a year, while retail had the lowest average rate of decline of 6.9 percent per year. The overall rate of decline with classified ads was 73.8 percent which indicates the great vulnerability of small advertisers when a crisis occurs. National ads fell by 60.7 percent, while retail ads halved and declined by 52.6 percent.

Table 4. Newspapers: Print and Online Ad Revenue 2003. - 2014. USA (mill. \$)

	Print		Online		Total	
2003	44.939		1.216		46.155	
2004	46.703	3,9%	1.541	26,7%	48.244	4,5%
2005	47.408	1,5%	2.027	31,5%	49.435	2,5%
2006	46.611	-1,7%	2.664	31,4%	49.275	-0,3%
2007	42.209	-9,4%	3.166	18,8%	45.375	-7,9%
2008	34.740	-17,7%	3.109	-1,8%	37.849	-16,6%
2009	24.821	-28,6%	2.743	-11,8%	27.564	-27,2%
2010	22.795	-8,2%	3.042	10,9%	25.837	-6,3%
2011	20.692	-9,2%	3.249	6,8%	23.941	-7,3%
2012	18.931	-8,5%	3.370	3,7%	22.301	-6,9%
2013	17.300	-8,6%	3.420	1,5%	20.720	-7,1%
2014	16.366	-5,4%	3.506	2,5%	19.872	-4,1%
Average		-8,4%		10,9%		-7,0%
2014 vs 2003		<b>-63,6%</b>		<b>188,3%</b>		<b>-56,9%</b>

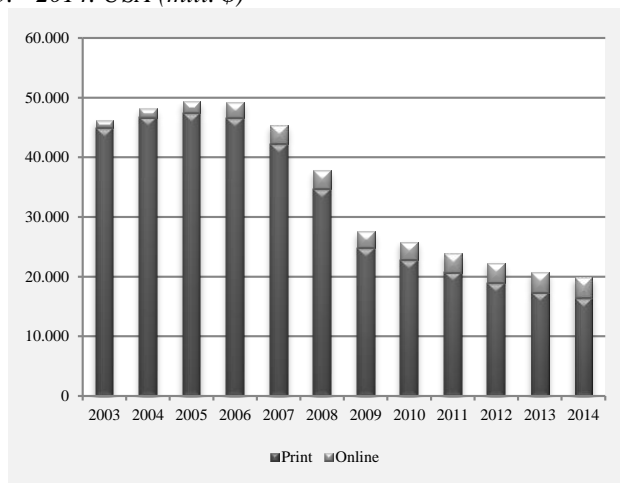


Figure 3: Newspapers: Print and Online Ad Revenue 2003. - 2014. (mil. \$)

Source: PewResearchCenter, Journalism and Media (own Illustration)

Source: PewResearchCenter, Journalism and Media  
(own Illustration)

Table 5. Newspaper revenue from retail, national and classified ads 2003. - 2014. (mill. \$)

Newspaper revenue from retail, national and classified ads (USA)						
	Retail		National		Classified	
2003	21.341		7.797		15.801	
2004	22.012	3,1%	8.083	3,7%	16.608	5,1%
2005	22.187	0,8%	7.910	-2,1%	17.312	4,2%
2006	22.121	-0,3%	7.505	-5,1%	16.986	-1,9%
2007	21.018	-5,0%	7.005	-6,7%	14.186	-16,5%
2008	18.769	-10,7%	5.996	-14,4%	9.975	-29,7%
2009	14.218	-24,2%	4.424	-26,2%	6.179	-38,1%
2010	12.926	-9,1%	4.221	-4,6%	5.648	-8,6%
2011	11.887	-8,0%	3.777	-10,5%	5.028	-11,0%
2012	10.984	-7,6%	3.335	-11,7%	4.626	-8,0%
2013	10.105	-8,0%	3.068	-8,0%	4.140	-10,5%
Prosje		-6,9%		-8,6%		-11,5%
2013 vs 2003		<b>-52,6%</b>		<b>-60,7%</b>		<b>-73,8%</b>

Source: PewResearchCenter, Journalism and Media (own Illustration)

All three types of ads had the largest drop in revenues in 2007 and 2008, and then in all the following years the trend continued with a somewhat slower rate of decline. Comparing the movement of revenue from ads in the newspaper industry of the United States, with total

revenues of newspaper publishers, it is interesting to note that total revenues declined continuously and the decline in revenue from ads did not dramatically reflect the overall revenue decline of publishers. In the same period of the three analyzed years, circulation fell by the highest annual rates, but with the passing of the crisis they began to stabilize, and in 2014, circulation again recorded a drop in sales.

Table 6 Digital: Top Five Companies in Digital Advertising (bill. \$)

Digital: Top Five Companies in Digital Advertising (bill. \$)												
	Google	(%)	Yahoo	(%)	Facebook	(%)	Microsoft	(%)	AOL	(%)	Total	(%)
2009	7,90		3,66		0,56		1,18		0,99		22,06	
2010	10,03	27,0%	3,66	0,0%	1,14	103,6%	1,49	26,3%	9,39	848,5%	26,29	19,2%
2011	12,84	28,0%	3,08	-15,8%	1,73	51,8%	1,83	22,8%	11,61	23,6%	31,99	21,7%
2012	15,05	17,2%	2,50	-18,8%	2,18	26,0%	2,27	24,0%	13,86	19,4%	36,80	15,0%
2013	17,10	13,6%	2,50	0,0%	3,28	50,5%	2,55	12,3%	16,66	20,2%	43,11	17,1%
2014	19,32	13,0%	2,55	2,0%	4,99	52,1%	2,91	14,1%	19,88	19,3%	50,73	17,7%
Average		<b>19,8%</b>		<b>-6,5%</b>		<b>56,8%</b>		<b>19,9%</b>		<b>186,2%</b>		<b>18,1%</b>
2014 vs 2009	<b>144,6%</b>		<b>-30,3%</b>		<b>791,1%</b>		<b>146,6%</b>		<b>1908,1%</b>		<b>130,0%</b>	

Source: PewResearchCentar, Journalism and Media (own Illustration)

The digitization of business processes enabled the newspaper industry access to new platforms where the contents of newspapers could be browsed. Newspaper content was customized to smartphones and tablets. The distribution costs of subscribed newspaper editions were reduced in multiple by switching to digital editions tailored to contemporary "screens". However, at the same time there was a process of cannibalization of circulation and advertising revenue because advertisers began to prefer a global social network and other entities on the network in order to capture a wider range of audience.

Table 6 shows the growth of the top five global digital advertisers. The total value of advertising in the analyzed period grew at an average rate of 18.1 percentage points or 130 percent in the period. By analyzing certain corporations is noticeable that *Facebook* is growing by an annual average of more than 50 percentage points. We could say that the old saying, *if it was not on TV it did not happen* can be rephrased to *if it was not on Facebook, it did not happen*. According to the results shown in Table 5, we can conclude that advertising revenues have not disappeared, but rather they have moved to new digital media. Mass advertising in mass media is moving to digital advertising through social networks and search engines on the World Wide Web. The disappearance of advertising revenue will again mark the death bells for some businesses in the newspaper industry worldwide.

## 8. TRENDS IN THE CROATIAN NEWSPAPER INDUSTRY

The Croatian newspaper industry for many years has been marking a decline in circulation and an increasing number of newspaper publishers that went bankrupt or are close to it. However, as part of the European social and cultural environment, it did not mark the beginning of the crisis at a time when it was happening in the United States. Table 7 shows the results of the analysis of movement of the circulation newspaper industry in the period from 2010 to 2014. The average drop in circulation dailies was 7.9 percentage points in the analyzed period, which would be 28.5 percent of the total. The largest decline in circulation occurred with weekly and monthly editions. Weekly editions declined an average of 16.1 percentage points a year, and monthly editions declined by 9.8 percentage points. The print of weekly editions was halved and the overall decline was 51.2 percent, while with monthly editions, the decline was 34.6 percent.

The total decline in circulation was moving at an average rate of 10.2 percentage points, or 35.3 percent in the analyzed period. The rate of decline of circulation was reduced in the last analyzed period, but did not show visible signs of market recovery. The fall in circulation of daily editions, by 28.5 percent, is at the level of the global average. If this result is compared with the fall edition of the US market from Table 3, then the fall of the Croatian market of 28.5% was very similar to the fall of the market in the US of 29.2%. However, should the analysis look at the US market in the period from 2010 to 2014, circulation in the US had an average growth of 0.4 percentage points per year, or a total of 1.6 percent.

Table 7 Croatian print circulation: 2010.- 2014.

Average print circulation falls: 2010. - 2014.						
	2011 vs 2010 (%)	2012 vs 2011 (%)	2013 vs 2012 (%)	2014 vs 2013 (%)	average (%)	2014 vs 2010 (%)
Dailies	-6,2%	-3,8%	-15,8%	-5,9%	<b>-7,9%</b>	<b>-28,5%</b>
Weekly	-11,0%	-15,7%	-27,0%	-10,8%	-16,1%	-51,2%
Bi-weekly	-9,5%	-12,4%	55,4%	-18,1%	3,9%	0,9%
Monthly	1,9%	-13,5%	-11,9%	-15,8%	-9,8%	-34,6%
Periodical	2,3%	-26,2%	-11,4%	-9,2%	-11,1%	-39,3%
Total	-4,7%	-11,1%	-14,7%	-10,5%	-10,2%	-35,3%

Source: Ipsos Puls (own illustration)

While the US revenues from publishing and advertising for been declining for years, in Croatia we have an example of growth in advertising revenues in printed media in 2011 by 2.4 percentage points. After the increase of revenues in 2011, income from advertising in printed media suddenly declined at a rate of 11.6 percentage points a year. This is shown in Table 8. The growth in advertising revenues in 2011 marks revenues from advertising on TV, radio and outdoor advertising (Outdoor). The total decline in advertising revenues in the analyzed period was made by all media, and the largest decline in revenue was with websites; the total opposite of global trends.

Table 8 Trends of Croatian media industry ads value: 2010.- 2014. (units)

Trends of Croatian media industry ads value: 2010. 2014.						
	2011 vs 2010	2012 vs 2011	2013 vs 2012	2014 vs 2013	Average (%)	2014 vs 2010
Print	2,4%	-12,8%	-7,8%	-28,0%	-11,6%	<b>-40,8%</b>
TV	14,8%	0,4%	1,0%	-28,3%	-3,0%	-16,6%
Radio	43,5%	11,7%	-13,4%	-36,4%	1,3%	-11,7%
Web	-31,8%	-5,0%	15,2%	-54,0%	-18,9%	-65,7%
Outdoor	2,2%	-21,6%	2,4%	-48,7%	-16,4%	-57,9%
Total	12,1%	-1,6%	0,0%	-29,1%	-4,7%	-

Source: Ipsos Puls (own illustration)

By comparing advertising results with the results of economic trends in the Republic of Croatia, we can find correlation between the growth in revenue from advertising in printed media 2011 and a slight recovery in economic activity in Croatia. Through 2009 and 2010, the economy of the Republic of Croatia marked a constant decline from quarter to quarter. In the second and third quarter of 2011, there was a slight increase in GDP of 0.2 or 0.4 percent. Thereafter, GDP again registered a continuous decline until the last quarter of 2014. Shown in Figure 4.

In 2011, there was an increase of revenue of all categories of the media industry, other than in web advertising. The largest increase in revenues from advertising was with radio with an increase of 43.5 percentage points, followed by advertising on TV with a 14.8 percentage points increase. The total increase in revenue from advertising in 2011 was 12.1 percentage points compared to the previous year. In the same year, revenue from Web advertising was decreased by 31.8 percentage points. In 2014 the drop in revenues from advertising on the web was 54 percentage points compared to the previous year. The total decline in advertising revenue in this period was the largest of all the analyzed categories and achieved a drop of 65.7 percent. When comparing this information with advertising revenues in digital editions of the newspaper industry in America, we get completely opposite trends.

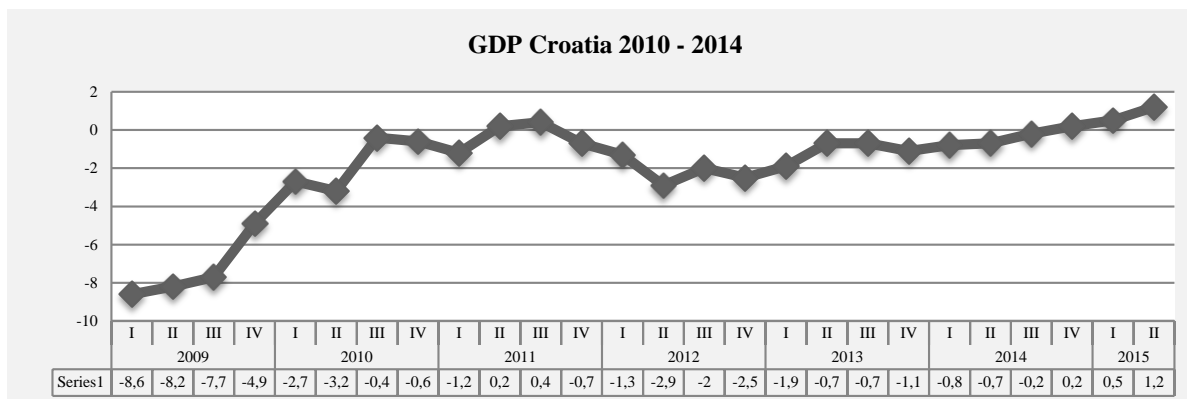


Figure 4. GDP Croatia: 2010. – 2014.  
Source: Croatian bureau of statistics

Figure 5 shows trends in advertising revenues in the newspaper industry of the Republic of Croatia. Investments in advertising and the movement of GDP between 2008 and the first part of 2011 had a completely opposite trend. While GDP declined from year to year, investments in advertising in printed media have continuously increased. In the American newspaper industry, revenues from advertising in printed media have been continuously falling since 2006. In the Croatian newspaper industry, advertising revenues recorded the first decline in revenue in 2012.

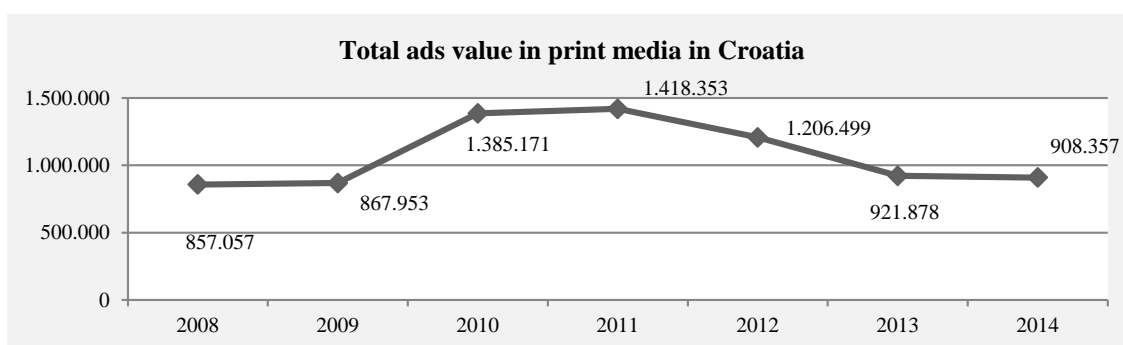


Figure 5. Total ads value in print media in Croatia 2008. – 2014. (000 HRK)  
Source: Ipsos Puls (own illustration)

Overall for the analyzed period in the Republic of Croatia, circulations and advertising revenues have been falling continuously. In the US market, the decline in circulation stopped in 2012, and then continued. The principal difference between the two markets is the digitization of circulation and the difference in the trend of advertising revenue in digital editions. In the Croatian newspaper industry there does not appear to be an increase in revenues related to the digitization of circulation and ad revenues from web editions. In the US market, despite

declining circulation and revenues on advertising, the development of the digital market is continuously being worked on.

## 9. CONCLUSION

In February 2016, BBC (online) an article called *Independent to cease as print edition* published a story about how the newspaper publisher Independent is abandoning printed editions of newspapers in March of the same year. The last copy of the daily printed edition will be on newsstands March 26 and the last number of weekend editions will be on newsstands March 20, 2016. After these dates, Independent will be followed and read only as a digital edition.

The fundamental purpose of this paper is to point out the changes that are taking place in the newspaper industry. Referring to the first hypothesis, we can conclude that the process of transformation is already continuing forward "full steam ahead". Independent is a fresh example of leaving the practice of the printed edition, which perhaps prevented the complete shutdown of the paper. Bagdikian (2000: 118) provides examples of daily newspapers in the United States who have disappeared under the pressure of competition and market monopolization. The first great shock was caused by the bankruptcy of *Washington Star* in 1981, a newspaper with a tradition of 140 years, which at the point of bankruptcy was selling more than 300,000 copies. Three weeks later, *New York Daily News* went bankrupt, and four months after it was *Philadelphia Bulletin* with a circulation of 400,000 copies. Bankruptcies continued, and the monopolization has led to a situation where only one daily newspaper can survive on the local market.

According to the results of a survey of newspaper circulation published on IFABC, the average daily circulation of Independent in 2008 was 198,863 copies, and in 2012 it dropped to 121,794 copies. Circulation fell on average 11.3 percentage points per year and 38.8 percent in the reviewed period. If we consider that the New York Daily News abandoned its operations with an average daily circulation of 1,500,000 copies because they could no longer cover the costs, the decision of the management of Independent was completely justified. In addition, the classic fundamental news production on ink and paper slowly ends its life in the mass production of a large number of publishers.

Mass production and mass media were created in Europe and have spread to the west. The wave of bankruptcies and the transformation of the newspaper industry as mass media began in the United States and then spread back to Europe. Just as modern and capitalism did not immediately penetrate across the ocean to America, also the changes that rendered the industrial society and postmodern did not immediately sweep across the European coast. The digitization and convergence of the media industry was first reflected on the technologically most developed markets. In the United States it resulted in the creation of vertically integrated cross media organizations that have globalized the media market and the winds of change were directed from the United States to other continents.

The European tradition of publishing, with its roots still in Enlightenment, remained to this day and Europe is a continent with the largest revenues from the publishing industry in the global market. However, the convergence of the media industry shook the foundations of the traditional news industry, based on ink and paper, on the European continent as well. The transformation of production to digital forms in regards to editions will be an inevitable process. In the context of all that has been stated and based on the analysis of the research results of changes in the global newspaper industry, it can be concluded that the Croatian newspaper industry is not keeping pace with the changes that occur in the environment. An open question remains for other research on how much was "contributed" by the management of news organizations, and to what extent the problem lies in the Croatian society that accepts change slowly. By analyzing data on the printed editions in Croatia, it is clear that circulations are steadily falling and that a number of publishers will disappear from the market. Nonetheless,

manufacturing and business processes are being executed with the same pattern and nothing is changing. The decline in circulations, in a large part, also influences the decline of general social standards in Croatia, which in turn results in fewer people buying newspapers. New generations, especially Generation Y and Z, have not developed the habit of reading printed editions which further contributes to the decline of printed circulation in the global market and in Croatia. Sheahan (2010: 4) to recap the habits of the generation sympathetically notes that generation Y, even when it comes to sex, have transferred to the online system. Leading global media corporations have already transferred complete publishing on tablets and smart phones and contents are available to all who are ready to pay a certain amount for it. Digitalization has enabled the globalization of information and there is little room left for local news and comments in classic newspaper editions.

The decline in economic activity and social standards in Croatia has also reflected on the quantity and price of ads in the media. This also endangered another basic pillar of income that keeps newspaper publishers in the market. An interesting result of this research is in the fact that economic activity and GDP fell, while revenue from advertising increased continuously until 2012. How much this all exhausted advertisers, but also newspaper publishers which have not changed business forms, will be the subject of future scientific research. The final result of such a business model shows a continuous decline in circulation and advertisement revenue. When we join the results of the decline of circulations with the results of the research on the decline of revenue from advertisements, with nearly unchanged business forms, we get the picture of the "Titanicization" of the Croatian newspaper industry. Music plays while unstoppable seawater is penetrating.

In the context of the second hypothesis, we can conclude that the Croatian newspaper industry has not developed the capacity it needs in order to monitor trends in the global market. The decline of printed editions is continuous. The monetization of digital content does not show results. There are even no special records of subscriptions to digital editions. Advertising revenues are falling continuously, and they can be expected to be smaller with declining circulation. The Croatian newspaper industry has not made a step forward towards diversified income and spreading to other categories of the media industry. The blurred boundaries of organizational and operational management, characteristic of the post-industrial era, have not yet knocked on the door of the solid boundaries of Croatian modernist news organizations. In Croatia, generation Z is already going to college, and the newspaper industry has not even found a solution to attract generation Y. Seemiller and Grace (2016: 11) emphasize that members of generation Z have the "if I don't, who will" approach. The generations born after September 2011 are used to being on line and receiving and transmitting news via social networks. At the same time, the management Croatian news organizations believe in the return of customers to kiosks. Postmodern will be knocking on the door of Croatian news organizations for a long time, unless a wave of bankruptcies starts.

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## THE GEOPOLITICS OF INTERNATIONAL AID: THE CASE OF SUB-SAHARAN AFRICA?

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### ABSTRACT

*On Tuesday May 28<sup>th</sup>, 2013, the billionaire and philanthropist Mr. Bill Gates attended a Q&A session at the University of New South Wales. During the session, a lady asked him: "Mr. Gates, Dead Aid, a book by Dambisa Moyo, illustrates that giving more aid to Africa over the course of the years did not alleviate poverty, instead it kept the economy crippled with governments asking for more aid. This fluke made a cycle of aid giving which resulted in nothing productive and it has not been used to solve the immediate problems and the money is not being used to make businesses sustainable in Africa. What's the foundation's view in this regard?" To which Mr. Gates responded "Books like that are promoting evil".*

*Mr. Gates' sound bite sheds light upon aid as a topic of controversy: in his creed, aid is humane, virtuous and will do the global poor a world of good while anti-aid literature is evil. From Tibor Mende and his famous book "From aid to the re-colonization" (bestseller in the 70s) to Dambisa Moyo and her book "Dead Aid", the issue of assistance to poor countries has been much talked about. Between the fifteen billion dollars transferred to Europe under the Marshall Plan and the thousand billion dollars sucked up by the sub-Saharan Africa since independence, we have come to understand that a poorly-designed assistance automatically produces state-aid recipients.*

*In this paper we will endeavor to weigh the geopolitical and geo-economic impacts of aid and demonstrate why aid, presumably an altruistic deed for the benefit of the poor and the needy, has sparked such a hot debate.*

**Keywords:** *Aid, assistance, geo-economics, geopolitics, poverty*

### 1. INTRODUCTION

In traditional societies, the poor and the needy all had their place in the community, no questions asked about aid or assistance. The unfortunate needed the less fortunate and vice versa: mutual aid was a natural behavior and nobody never thought of it in terms of assistance. Who would have imagined that the same word would one day often designate enslaving practices against persons in distress, or serve as a justification for governments to conduct military or repressive actions against their own people? The history of debates and practices around the concept of aid shows that the inconceivable has in fact become a reality. More than a century and a half ago, Henry Thoreau was already worried about possible abuses of some voluntaristic actions:

*"If I knew for a certainty that a man was coming to my house with the conscious design of doing me good, I should run for my life"<sup>1</sup>*

Today, Joseph E. Stiglitz, a Nobel Laureate in Economics in 2001, cites in his book "The Price of Inequality" some otherwise edifying examples of how aid-specialized organizations such as the International Monetary Fund were able to destabilize the entire populations in Indonesia or

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<sup>1</sup> Farcet G. (1998) «Henry Thoreau: L'Éveillé du Nouveau Monde-Henry Thoreau: The Enlightened from the New World», Paris, Sang dans la Terre, P.35.



Ethiopia for example. Thus, aid as construed by the modern language has nothing in common with aid as experienced in vernacular communities. The often spontaneous and direct relationship between two individuals called "neighbors" has turned into a highly professionalized intervention defined in medium or long terms. An intervention often coupled with an instrument of power exercised against those it claimed to serve.

In vernacular societies, sharing and caring were not only moral qualities, but also guarantees of a good social cohesion. Helping your neighbor meant acting at several levels. As an individual, it allowed you to enrich your own inner world and develop your ability to compassion and charity. Socially speaking, it boosts your moral authority over the other members of the community. Collectively, these individual and social fulfillment processes favored the emergence of similar qualities across the entire community that provide each member of the society with a productive balance between the requirements of personal fulfillment and those of social development.

By embarking on the path of a large-scale vision of assistance, the religious authorities have greatly contributed to its institutionalization and corruption.

For the Church, it was important to offer an institutional translation of the word of Christ. The love of the neighbor had to be encouraged indeed, but it was inconceivable that a deed representing the divine justice be not exercised in the name of the Church of God, the sole qualified institution to recognize the true poor from the false. And while aid was institutionalized, it was also specialized: the love of the neighbor shall be practiced preferably for the benefit of a given institution.

For those seeking to reconstruct the exact history of the concept of aid, the events that followed this first institutional takeover are particularly instructive. They show that aid and aid promotion have always enabled whatsoever government in power to impose its image and protect its own interests.

In medieval Europe, the institutionalization of aid by the Church endorsed this belief: anyone who wanted to be absolved from their sins had only to pay the price, the Church would then take care of the rest. The amount paid would prompt God to find them a place in Heaven. Thus, the original charity began to turn into a curious exchange currency: the aid to the poor taking on the appearances of a tacit insurance contract in order to increase the chances of the penitent donor to escape the flames of Hell.

In short, aid as it was perceived by human societies has nothing in common with that preached by the international institutions and the aficionados of the *pensée unique* –a mainstream ideological conformism-. The concept of assistance was reviewed and examined by Bretton Woods institutions which broke up with the ancestral altruistic practices and traditions whether in Europe, in Africa or the Middle East. Far from this "stone age economics" of Marshall Sahlins, Adam Smith's invisible hand has deflected aid away from its main objective which is helping the destitute to recover from a situation of adversity instead of putting them in a chronic state of dependence on donors. As the late Hassan Zaoual put it: "a poorly devised assistance generates automatically state-aid recipients".

## **2. THE INVISIBLE HAND OF AID**

In the march to the industrial revolution and the triumph of the capitalist economy, three phenomena have more determined the mutations in the discourses and practices: the seizure of power by the People acting on behalf of the poor –the universal suffrage ensuring this new

power—, the threat of pauperism, and finally the discovery of aid as an instrument of economic promotion.

Pauperism was even more threatening as it meant "the state in which individuals have the right to supply their needs by using public funds legally assigned to this purpose". For all these reasons, Eugene Buret (1840) himself did not hesitate to deem it as "the enemy of our civilization."

The concern of every ruling class was that the growing pauperism, unlike poverty, was not merely a personal destiny marked by misfortune but rather a social problem of unprecedented magnitude. This horde of the "bad poor", inconsistent and dangerous for society as well as for themselves, did not only embody "a disorganized, spontaneous coalition escaping every social rationality" but it also sought to monopolize all rights to this legal assistance while refusing any constraints. However, these fears and this indignation did not all have the same background: the phenomenon that some refused to interpret as a result of the Industrial Revolution was felt by others as a social threat, a challenge to the mechanisms of capital accumulation.

It is in this quite confused context that aid emerged as a possible solution to the problems created by the industrial evolution.

In theory, the new economic discourse on the issue of misery remained ambiguous: on the one hand, it claimed that the new sciences and wealth production techniques would know how to eradicate poverty once for all, on the other hand, it had to recognize that social and economic inequalities were not only an integral part of this production system, but they were in many ways the support and counterpoint thereof as they represent a reservoir of unmet needs essential to this very new productive system.

Thus, misery had some benefits as long as it was not scandalous .i.e. as long as it was only a natural or social inequality. Charles Dunoyer (1825), a pioneer of social economy, considered for instance -and he was not alone- that a "well-behaved and mellowed out" poverty was one of the conditions for economic prosperity and the proper functioning of a production system based on the division of labor. These inequalities had another advantage:

By their sole influence and without any resort to violence, they had the power to beget more inequalities and thus produce large discrepancies in the degree of freedom which everyone could enjoy.

This poverty had therefore its place in the logic of the self-regulating forces and the "invisible hand" of the market which are supposed to restore order and equilibrium at every moment, including during disturbances by factors exogenous to economy.

One of the first to express reservations about the magical power of this "hand" is the Reverend Thomas Robert Malthus, described later by Keynes as "the first economist of Cambridge". This economist, famous for his pessimistic theories on population, is also the one who placed the emblematic figure of "the Irish peasant" at the center of a hypothesis which went then against the grain of mainstream thinking. If this analysis of Malthus is so particularly relevant to us here, it is because it announced the revolutionary turn that would lead to a utilitarian and modern perception of aid: now that it is commoditized, aid will no longer be but an instrument of governance and subtle control of its target populations.

The "Irish peasant" who haunted Malthus throughout his life, a poor quite similar to the poor in vernacular societies, symbolized a human archetype rather ominous for the future of the economy: eating only potatoes and dressed in rags, he seemed not attracted by any means to

owning objects. He used to consume only what he produced and never bought a thing, and yet he seemed content with his lot. As a veritable anti-homo economicus, he was a permanent threat to economic growth. It is the persistence of men and women of similar behavior within society that led Malthus to two conclusions:

- That the "invisible hand" of the economy is not sufficient to ensure the smooth running of the productive system "at least as long as the Irish peasant would resist the seduction of manufactured needs".
- That for the system to sell its products, it should start helping this peasant so that his needs match as much as possible those of the economy.

The actual social assistance will no longer signify the supply of lifebuoys thrown here and there to give a chance of survival to useless mouths: it will be transformed into a dynamic and preventive instrument prompting each and every one to meet the production needs.

### 3. INTERNATIONAL AID & POVERTY: WHAT ALTRUISM IS IT?

Despite the theoretical differences that we have just mentioned, there is a common aspect to human societies: the fight against all sorts of poverty. If the causes and remedies are different, the objective is widely accepted. The idea that some humans could be facing famine, doomed to an early death, illiteracy or a second class citizenship is contrary to what the concept of justice means to most of us. We know that all the great religions were concerned about fairness, inciting or even compelling their followers to regard the fight against extreme poverty as a moral duty. In fact, when addressing the fight against poverty by a donation, be it in kind (give a little or a lot of one's time), in cash or material (goods), it is difficult to dissociate the act as such - defined as altruistic – from the mentioned moral duty.

"The disadvantage of sociological altruism is that it is perceived with values: right/wrong, good/bad, free/totalitarian, just/unjust) that make it incompatible with economic reasoning .... This moral altruism should be corrected by returning to the philosophical tradition.... In economic philosophy, altruism corresponds to an extended rationality expanding economic calculation to the relationship that individuals have with their social environment." <sup>2</sup> "Essentially by definition, an altruist is willing to reduce his own consumption in order to increase the consumption of others."<sup>3</sup> This is a benevolent altruism. When an individual gives a coin to a beggar on the street or some of their time to an elderly person or shares their home with a poor etc... without turning this act into a media event or even disclosing it, this is generosity, solidarity, altruism. This was the case for example of the ARTC (Association for Research on Treatment against Cancer) in France at the end of the last century. This is also the case of some public corporations for the jobless and rehiring firms. The payment of government subsidies for the integration or reintegration of people in difficulty does not mean the ability to ensure a social follow-up that would attain reintegration. This is somehow usurping public funds. Similarly, the payment of monetary amounts to charity can sometimes be a matter of a disinterested altruism, and sometimes of an interested altruism.

In France, for example, a monetary donation to a recognized public utility association (such as Restaurants du Cœur) is compensated by a (monetary) reduction of the income tax. This mechanism introduced by the public authority raises several questions:

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<sup>2</sup> Jarret M-F. et Mahieu F.-R. (1998) « *Economie publique: théories économiques de l'interaction sociale-Public Economics: economic theories of social interaction* », Paris, Ellipses, p. 82

<sup>3</sup> Becker Gary S. (1997) in Jarret et Mahieu *op. cit.* p. 21

- The "donations" are not managed (managerially speaking) spontaneously by the donor but are organized and institutionalized. The state seeks to influence the behavior of households via tax incentives and it is possible to imagine that this behavior could have been different for some of them should there be no tax reduction in counterpart.
- An objection can be made immediately when all donating households are not all subject to income tax. Still, they have no financial benefit. The act of donating has then a specific externality for taxable households. This does not mean that they are not altruists but it is more likely that the computation of the tax reduction is one element - among others - that influences the choice and amount of the donation(s).
- In these conditions, can we consider that the donations from both (different) categories of households refer to the same altruism? Undoubtedly, they seek to mitigate the effects of poverty and / or partake in research breakthroughs that affect us all but it is arguable that in a market society, an act of donation has in counterpart a counter-donation -not symbolic as in other societies- but monetary. Non-taxable households make a social and / or moral "profit" out of their donations. Other households also derive a monetary benefit as the distinction between households by income class is established beyond the sources of their income and their respective expenses.

It is still possible to question the benevolent or malicious nature of altruism based on the advertisement that accompanies certain actions. If, basically, no one can argue that giving to the poor is a selfless act, the fact is that sometimes this act is revealed to the public while sometimes it is carried out with utmost discretion. Asserting one's generosity with or without a monetary counterpart such as the reduction of income tax in France, may mean that the donor searches the esteem of their entourage. The initiative makes sense only if it is related to what sociologists call the social interaction. Donating motivation and helping the poor depend then (at least partly) on how they appear in the eyes of the other whose recognition and approval are solicited by the donor. The individual act is not so disinterested and does not fall out of the societal framework. This type of behavior seems even more plausible when advertising donations becomes the norm. In a context of mass dissemination of information and media explosion, does the "Peoplisation" of charitable organizations and foundations that are continuously seeking donations for "just causes" denote altruism? The jury is still out!

"And what if the stars were only icons entrusted to do good business for the humanitarian industry." <sup>4</sup> The President of UNICEF France confirmed bluntly: *"Yes, we need the "Peoples", they offer us easy access to the media and arouse donors' interest in our cause. Emmanuelle Béart's press conference testifying to what she saw in Sierra Leone has become an event."* <sup>5</sup> The actress states in the same article that she "does not believe in altruism... but rather in exchange." This example is not exhaustive, yet is indicative of the "commodification" of aid, of the fight against inequality, of the fight against deprivation, of suffering and it is not for sure that this is done for the benefit of recipients only. Other associations such as Médecins Sans Frontières (MSF) chose to appeal to generosity by phone or the Internet, no showcasing on television.

Finally, regarding the limits of "organized altruism", we would like to mention a few conclusions of the Audit office in January 2007, on the management of donations in the wake of the "natural" disaster, the Tsunami. In France, 340 to 350 million euros were collected plus 67 million euros of public aid. The report states that only one third was spent due to the flooding of international aid. The budgets were significantly too high for the actual on-site staff to manage. One can also read in this report that part of the donations received by charitable

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<sup>4</sup> «Le Nouvel Observateur», Feb 22<sup>nd</sup> -28<sup>th</sup>, 2007, p. 94-97

<sup>5</sup> Ibidem

organizations or international agencies was redirected. The UNICEF for example transferred 57.4 million euros to its headquarters in New York. For the Red Cross and Catholic Relief Services, the percentage of amounts used compared to donations is about 40%. The amounts available can be granted to local NGOs, to intermediaries, namely in the building sector and public works.

In an article published in "Le Nouvel Observateur", Serge Paugam (2013) underlined the enthusiasm for private solidarity "in the form of an appeal to generosity via the media .... This would be perceived sometimes with higher virtues than public solidarity which is often considered as bureaucratic and impersonal ... Of course, one must not despise this generosity, but must remember that it cannot be considered as an alternative to collective solidarities as conceived at the end of the nineteenth century." A little further on, the author denounces after all the fact that governments often react on the basis of one thing at a time and that more visible solidarity actions are those that take place in an emergency. "The news highlight, periodically, all the visible signs of a solidarity that we think spontaneous, but which is actually entertained by the media."

Fighting against poverty via public policies and / or private solidarity, akin to altruism, has limitations and challenges theorists. For Van Parijs (2003), justice should be sought .i.e. allow everyone - not just in theory (location) - to have access to goods and services. «It is more about what is given to each and not what they do with it, it helps them achieve their own conception of life and not a particular conception that the society would consider superior to others. » That means to define a method whereby it is possible to offer opportunities to everyone and thus adhere to ethics without preaching morals. This is a major challenge for the theory of "modern" justice. A conception of an acceptable justice according to the author and which should be egalitarian in the sense that "it must express a form of material solidarity between all members of the concerned society.... Justice is not a matter of equity in exchange.... Nor is it a matter of collective optimality understood as the production of acts globally effective for the common interest. Some inequalities can be righteous, but only if they help improve the lot of the less advantaged. »

Fighting inequalities may consist in acting upon the chances and capacities, real chances and concrete capacities. It doesn't mean to express intentions or show compassion. Galbraith considers the latter as "*the most truly conservative course. There is no paradox here. Civil discontent and its consequences do not come from contented people--an obvious point to the extent to which we can make contentment as nearly universal as possible, we will preserve and enlarge the social and political tranquility for which conservatives, above all, should yearn.*"<sup>6</sup>

Long before Galbraith, Simmel in his reflection on the sociology of poverty had "a disillusioned look on charity and the private<sup>7</sup> and public philanthropy, these do not represent an end in itself but a means to achieve the cohesion of the society and the guarantee of social ties "(Paugam, 2013, 47). Does assistance aim to primarily satisfy the recipient? The donor? The established

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<sup>6</sup> Van Parijs Ph. (2003) « *Ethique économique et sociale-Social and economic ethics* », Paris, La découverte, p.5.

<sup>7</sup> Philanthropy is therefore flourishing, especially in the USA where charitable endeavors are legion. The new philanthropists are however increasingly straying away from the traditional methods of foundations management. In fact, they are seeking to make their structures more financially and socially efficient while dreaming of the advent of philanthro-capitalism" The Birth of Philanthrocapitalism, The Economist, translated into French by F. Boisivon in «Problèmes économiques», n°2912, December 6<sup>th</sup>, 2006.

order? The example of the British trade unions (quoted by Simmel) which help the unemployed union member allows to understand that, on the one hand, they seek to alleviate income inequality but, on the other hand, they also preempt job seekers who will go now to offer their free work capacity at a lower salary, which would have the effect of lowering wages in their sector of activity. The author goes even further: helping the poor through assistance means to avoid riots, violence to obtain income through various ways; it's even to guarantee a certain stability to society to the extent that assistance is, in fine, conservative. "The goal of assistance is precisely to mitigate certain extreme manifestations of social differentiation so that the social structure can continue to be based on this differentiation" (Paugam, 2013, 49).

We find this critique of assistance to the global poor with Thomas Pogge<sup>8</sup>. The international economic interaction is considerable and, contrary to Rawls, the author thinks that poverty and extreme poverty are not due to domestic (or national) causes. While it is true that some Asian and African countries had a comparable level of GDP per capita in the 1960s and that the African countries were largely outstripped 50 years later, this differentiation in the trajectory cannot be explained by domestic factors which, according to Rawls, are likened to the political culture, the religious, philosophical and moral traditions, the demographic policy, the governments etc. For Thomas Pogge, we must not ignore or obscure the burden of a history tainted by unspeakable horrors: sordid slavery, unscrupulous colonialism and even atrocious genocides. *"Though these crimes are now in the past, they have left a legacy of great inequalities which would be unacceptable even if peoples were now masters of their own development ... By seeing the problem of poverty merely in terms of assistance, we overlook that our enormous economic advantage is deeply tainted by how it accumulated over the course of one historical process that has devastated the societies and cultures of four continents."*<sup>9</sup>

Since the end of colonialism the world economic order has been based on rules in favor of the rich countries by protecting them, for example, from developing countries imports via the World Trade Organization (WTO). The control of information, of expertise, of production and access to Information and Communications Technology (ICT), gives rich countries a greater power of negotiation so that this world economic order reflects more the interests of the businesses and citizens of rich countries and, de facto, less those of the poor countries. In these conditions, assistance as an adjustment variable cannot reduce inequality - as little - but instead allows to maintain a hierarchy of wealth levels. To support his thesis, the author borrows the story attributed to Peter Singer *"of a healthy young professor who, walking by a shallow pond, sees a small child in it about to drown. Surely, Singer says, the professor has a duty to save the child, even at the cost of dirtying his clothes. And similarly, he argues, we have a duty to send money to poverty relief organizations that can, for each few dollars they receive, save one more child from a painful hunger death."*<sup>10</sup> In the eyes of Thomas Pogge this perspective reinforces the common moral judgment that the citizens and the rich countries are as responsible for poverty as the healthy young professor is for the child. Several reasons explain this widespread feeling in developed countries:

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<sup>8</sup> Pogge Th. (2003), Porter assistance aux pauvres du monde-Assisting the global poor-, *Raison publique*, n°1, Octobre, Bayard, pp. 104-108, translated to French by P. Savidan.

<sup>9</sup> Pogge Th. (2003), Porter assistance aux pauvres du monde-Assisting the global poor-, *Raison publique*, n°1, Octobre, Bayard, pp. 104-108, translated to French by P. Savidan.

<sup>10</sup> Singer P., (1972), « Famine, Affluence and Morality », *Philosophy and Public Affairs*, 1, 249-43 in Pogge Th. (2003), Porter assistance aux pauvres du monde-Assisting the global poor-, *Raison publique*, n°1, Octobre, Bayard, pp. 104-108, translated to French by P. Savidan.

- Psychologically speaking, it is a source of comfort for the people living in the developed world.

- Considering that the domestic factors are responsible for poverty means underestimating or ignoring the global factors. Since some countries are developing and others are not, it is possible to achieve the eradication of poverty on the basis of the domestic factors.

- Many governments in poor countries are corrupt which is hardly attributable to the world economic order but rather to the behavior of certain elites who do not care about the living conditions of their compatriots. Only after having established democracy and the rule of law in these countries that reforms at the world level could be initiated.

Pogge prefers to emphasize that there is no corruption with neither the corrupted nor the corrupter! Corruption has the effect of enriching a minority at the expense of a majority maintained in a state of poverty or extreme poverty: lack of transparency in awarding public contracts, import licenses granted in return for the most generous kickbacks, bribes in arms industry, imports of unnecessary and overpriced products, etc... in other words, squandering public money and / or diverting revenues. Worse, "bribed politicians accept the development of sex tourism, the import of toxic products and waste, the location of polluting companies, the forced labor of young children", etc. That is to say so many causes<sup>11</sup> that do not serve the interests of the local population but that hinder their welfare and therefore, development. The solution to poverty and extreme poverty is not public assistance if it maintains the disparity in living standards, nor the private generosity of some and altruism of others (that must not be ignored) whose impact is very limited. Without hushing up the (co) responsibility of certain elites in the poor countries, according to Pogge, we must really:

- reduce the harm caused.

- not take advantage of injustice at the expense of those who endure it.

- compensate the poor .i.e. reduce the impact of unfair global rules that result in positive externalities for rich countries (such as the exploitation of natural resources in poor countries) and negative externalities for poor countries (inveiglement of their resources, environmental pollution, namely greenhouse effects due mainly to rich countries' consumption patterns).

#### **4. BACK TO THE SOURCES OF FAILURE OF AID TO AFRICA:**

Between 1948 and 1952, the United States transferred more than 13 billion dollars (100 billion dollars today) to assist in the reconstruction of Europe after World War II. We agree to acknowledge the resounding success of the Marshall Plan to rebuild the European economies devastated by war. The plan did not only ensure the economic success of recipient nations, it also contributed, in the opinion of many analysts, to the restoration of political and social institutions of crucial importance for peace and prosperity today in Western Europe. This is true, but even if the idea of aid policy to Africa arose from the success of the Marshall Plan in Europe, these are two completely different realities. Presenting the positive results of the Marshall Plan as a promise of similar achievements in tomorrow's Africa is completely wrong.

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<sup>11</sup> The IMF latest estimates are edifying: the amount of money laundered is tenfold or even more since 1990. Other than drugs and forgery, the underground economy covers the trafficking in human organs, endangered species, industrial waste, counterfeit money, handguns and nuclear centrifuges.

### Why?

First, the European nations were not totally dependent on aid. Despite the ravages of war, the economic revival of Western Europe was already underway; the continent had other resources. At their peak, the flows of the Marshall Plan represented only 2.5% of the GDP of the main recipient countries, such as France and Germany, and somehow they never exceeded 3% of the GDP of any country in the five year term of the program. Africa, long submerged by aid, receives today assistance for development equivalent to almost 15% of its GDP, more than four times the Marshall Plan at its peak. According to Dambisa Moyo (2009) "*Given Africa's poor economic performance in the past fifty years, while billions of dollars of aid have poured in, it is hard to grasp how another swathe of billions will somehow turn Africa's aid experience into one of success.*"<sup>12</sup>

In addition, the Marshall Plan was time limited. The United States had set a target, the European countries accepted the terms of the contract and signed the document. Money flowed abundantly for five years only. In contrast to the Marshall Plan financial injection, decisive but short, Africa has, generally speaking, received uninterrupted support for at least fifty years. An ongoing aid for an unlimited duration so that no effort would be needed. Thus, in the absence of any explicit threat of aid interruption, and as nothing inspires the feeling that one day it could end, African governments have had to consider the aid as a permanent and secure source of income; they have no reason to think that the lakes of lucre will not continue to flow indefinitely. There is no incentive to build long-term financial plans, no rhyme or reason to look for other ways to finance development when all you have to do is sit and wait quietly for your check to cash.

Crucially, the Marshall Plan context was so different from the African context. Before the war, the devastated European nations had already the necessary institutions: they had an experienced public service, well-managed companies, an administration of the courts and effective social organizations. After the war, all it took was an injection of money to restart the machine. The Marshall Plan provided an aid for reconstruction, not for economic development. No matter how wrecked Europe was, it had a structure in place, a political, economic and physical structure, while, despite the infrastructure inherited from colonialism, Africa had not experienced any effective development. Building, and not rebuilding, the political and social institutions requires more than money. The flow of billions of simoleons of aid, poorly controlled and regulated as little as possible has resulted in undermining the establishment of these institutions as well as of a sustainable growth. In this respect, the recent and successful experience of Ireland (before the subprime crisis), which received substantial sums from the European community, cannot be cited as evidence that aid might work in Africa. For, as the post-war Europe, Ireland had the institutions and infrastructure required to master and control aid and make it produce a significant economic impact.

Ultimately, while the aid provided by the Marshall Plan targeted the physical infrastructure mainly, assistance to Africa covers almost every aspect of the economy. In most poor countries today, the aid is channeled to the public service, the political institutions, the military, public health, education, infrastructure.... The more the scope of aid is extended the more corrosive aid is, and the greater aid dependency culture is.

Aid advocates underline the economic success of the countries which today have ceased to be assisted after having received assistance in the past. These are countries such as those of the IDA (International Development Association). They are twenty-two countries and they include

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<sup>12</sup> Moyo D., *L'aide fatale-Dead Aid-*, Editions JC Lattès, 2009.



some of the emerging countries that experienced the greatest economic successes: Chile, China, South Korea, Thailand and Turkey. Three of them only are African: Botswana, Equatorial Guinea (mainly because of the discovery of oil deposits) and Swaziland.

Aid champions suggest that these countries have substantially reduced poverty, increased income and improved the living standards thanks to a large-scale assistance.

However, as in the case of the Marshall Plan, it should be noted that the aid flows in question were relatively moderate (i.e. less than 10% of the GNP) and of short duration. Botswana, often cited as the classic example of a good student of the IDA, had actually received substantial foreign assistance in 1960 (20% of the GNP). Between 1968 and 2001, the average economic growth of Botswana per capita reached 6.8%, one of the highest in the world. But it is not aid that is to be held accountable for this performance. Botswana had vigorously pursued a policy favoring the market economy and that is the key to its success - its trade policy was open to competition, monetary stability was sought and the fiscal discipline observed. Crucially enough, in 2000, the aid to Botswana represented only 1.6% of the national income, that is to say, a tiny proportion compared to aid nowadays in so many African countries. The success of Botswana lies in the fact that it ceased to be aid dependent.

Until the middle of the first decade of the 21st century, many believed that aid was synonymous with poverty reduction. The theses which were developed afterwards came to deny this approach. In her book "Dead Aid", Dambisa Moyo cites the fictitious example of an African manufacturer of mosquito nets. He produces about 500 nets per week. He employs ten people who, as usual in Africa, maintain each fifteen relatives. Despite their hard work, these people cannot make enough nets to effectively combat the malaria-carrying mosquitoes. A Hollywood star enters the scene, runs a crowdfunding campaign and bullies Western governments into sending 100,000 mosquito nets to the region. The operation amounts to one million dollars. The nets arrive and are distributed. A good altruistic action is accomplished. But once the market was flooded with these nets, the local manufacturer had to close down. His ten employees can no longer feed the 150 souls who depend on them (and who are now forced to live on alms), bearing in mind that in maximum five years the majority of the imported nets will eventually be torn and useless.

This is the micro-macro paradox. An effective intervention in the short term can have only very few lasting benefits. Worse, it risks to unintentionally undermine the existing chances, no matter how fragile they are, of any authentic sustainable development.

Thus, at first sight, aid appears to have a positive effect. But with hindsight, we see that not only the overall situation did not improve, but it worsened.

In almost all cases, short-term assessments create a false impression of aid success. But this kind of assessments is not relevant when it comes to tackling Africa's problems over the long term. We should measure the effectiveness of aid by questioning whether it contributes to sustainable long-term growth and lifts up the greatest number of individuals out of poverty. And from this perspective, aid proves to be a failure.

That is said, the proposal of a new food aid formula launched at the Food Aid Conference in Kansas City in 2005 was an attempt to give a new direction to the policy of assistance which could benefit African farmers. The said proposal would allow a quarter of the US Food for Peace budget to be used for the purchase of food in poor countries, rather than only buy food from American farmers and ship it by sea. Thus, instead of flooding the American food markets and ruining the local farmers, this strategy would lead to use aid money to buy the products

from the local farmers and distribute them to the locals in need. Going back to the example of mosquito nets, one could imagine that the donors would buy those nets from the local manufacturers and then sell them or give them to the locals. This approach should be applied to all problems.

Aid advocates argue that aid works - but that rich countries are not generous enough. They plead that if Africa was given a "big helping hand" i.e. a substantial increase in aid for the decisive investments, Africa could have escaped the persistent poverty trap. In fact, Africa needs increased aid, massively increased aid. Only then things will truly improve.

In 2000, 180 countries subscribed to the Millennium Development Goals (MDG). This eightfold action plan targeted health, education, environment preservation, child mortality, and the alleviation of poverty and hunger. In 2005, the program cost was revalued: an additional injection of \$ 130 billion per year would be needed to achieve the objectives of the MDG in a number of countries. Two years after the collective commitment to this program the United Nations organized an international conference in Monterey, Mexico on the theme: Financing for Development, during which donor countries promised to increase their contributions (an average of 0, 25% of their GNP) and bring them to 0.7% in the belief that the annual additional 200 billion dollars would finally settle the persistent problems of Africa. In practice, most of the commitments made by donor countries were not honored, and aid champions, clinging to the failure of donor countries, saw in it the reason for the backwardness of Africa. But the notion of giving "a big helping hand", the decisive thrust, skirts one of the great problems of aid, namely that it is fungible - that the amounts assigned to a certain goal can be easily diverted, and used differently, especially for irrelevant or even harmful projects. It's noteworthy that the uncontrolled flow of aid always runs the danger of being consumed rather than invested, lining up the pockets of individuals instead of landing in the public treasury. When this happens, and it often does, no sanction is imposed, no punishment is inflicted. More subsidies means more corruption.

One of the gloomiest aspects of this aid fiasco is that donors, politicians, governments, academics, economists and specialists all know deep within themselves that aid does not work, that it never has and it never will. In his comment on some assistance action, the Director of Government Economic Services at the UK Ministry for Trade and Investment made this remark: "They know it is pure hot air but it sells their T-shirts." Welcome to the real world!

Countless studies and reports (often carried out by donor countries) showed that, after several decades, and after billions of dollars spent, aid had not had any appreciable impact on development. Examples: Clemens in 2004 recognized that there was no sustainable impact of aid on growth, Hadjmichael (1995) and Reichel (1995) found a negative relationship between aid and savings, Boone (1996) concluded that aid had financed consumption rather than investment. On the other hand it was demonstrated that foreign aid had increased public spending and unproductive consumption, and failed to promote investment.

Even a cursory glance at the available data suffices to suggest that, while aid has soared over time, growth in Africa has been declining and has been accompanied by a more accentuated poverty. Over the last thirty years the most aid-dependent countries can boast an average annual growth rate of less than 0.2%.

For the majority of these countries the direct consequence of aid was tailspinning into poverty. While before the 1970s most economic indicators were on the rise, a decade later Zambia was economically ruined. Bill Easterly, professor at New York University and former economist at the World Bank, notes that if Zambia had converted all the aid received since 1960 into

investments and had relied on market growth, it would have had in early 1990s a per capita GNP of around 20,000 dollars. Instead, Zambia GNP was lower than in 1960 and was less than 500 dollars per capita! In fact, it should be thirty times higher than it is today. Between 1990 and 1998 aid to Africa skyrocketed from 11 to 66%, a staggering progression, only to see about 600 million Africans controversially trapped in poverty.

The case against aid stands on firm ground, it is so persuasive that even the IMF which plays a leading role in this area warned the fervent supporters who pin high hopes on aid and see in it the instrument of a development it cannot eventually stimulate. The IMF also recommended that governments, donors and organizers of various campaigns be more modest in their statements and not pretend that increased aid would solve the problems of Africa. We would like that this moderation be the prelude to real change.

The most mind-boggling aspect of this issue is that there is no other area of human activity, be it business or politics, where one would not think to change course and would persevere in error in spite of compelling evidence of utter failure.

Such is the status quo: sixty years, over one trillion dollars spent on aid to Africa and a result that is more than modest. If aid was just harmless, if it just did not do what it had claimed to do, this paper would not have been written. The problem is that it is not harmless, it is evil. It is not part of the potential solution, it is part of the issue. In fact, aid is the issue.

## 5. CONCLUSION

Whether at a national or international level, aid aims primarily at helping the alleged "donors" to maintain the devices that perpetuate their positions of power and social privileges, while depriving the poor of their own means to fight against poverty.

For the poor, this aid embodies the logic of an economy which not only commits all humans to often harmful external donations that are beyond their control, but also which destroys the great human and social balances that the vernacular lifestyle of the poor had created to help them confront necessity. The social system this economy seeks to establish in lieu may lead to the perpetual "quarantining" of many people and the dislocation or even the implosion of their societies. It institutionalizes a form of secular charity that transforms the beneficiaries into permanent aid-dependents, thus more and more dependent on a system of needs that corrupts both body and soul alike.

We easily understand now why the promoters of major international meetings regularly held in favor of helping the poor - one of them which gathered Heads of States in March 2002 at Monterrey, Mexico, - carefully avoided any debate on the root causes of the production of misery and injustice. In fact, they are well aware that a careful examination of these cases would unveil the fraud perpetrated today worldwide under the brand of aid. Indeed, such a debate risks to disclose the perverse collusions, often structural, which, always in the name of aid, unify the leaders of the North and the South against their own "subjects". And when, for the sake of propaganda, the Northern "generous donors" threaten to reduce their "aid" on the grounds that the recipient governments are corrupt, this examination would eventually reveal all the machinery set up by these same donors to "help" these "rogue" governments rule over their own populations. Finally, a serious investigation of the underlying reasons for these maneuvers would demonstrate to the world opinion that the most of the aid destined to eligible poor countries is intended whether to strengthen military and coercive programs or to restructure their economies to be adapted to the requirements of the sole global market.

Hence this bitter conclusion: what we insist on calling aid is but an expense to strengthen the structures that generate misery. However, the victims who are stripped of their real properties are never assisted since they seek to stand out from the global productive system in order to find alternatives in concert with their own aspirations.

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## OPERATIONS OF THE BIG HOTEL COMPANIES DURING ECONOMIC CRISIS - EMPIRICAL RESEARCH IN CROATIA

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### ABSTRACT

*Tourism is one of the most important economic activities in the Republic of Croatia. The share of tourism in gross domestic product is 17.2% which is significantly higher than in competitive tourist countries where tourism has less than 10% share in the gross domestic product. Croatian tourism has significantly raised its results starting in 2000 year.*

*However, in 2008 year the world economy was affected by the economic crisis. The situation, in the which companies in all industries found themselves, demanded the swift reaction with an aim of diminishing the negative effects of the crisis.*

*The specificity of the Croatian tourism is that, in a time of crisis, it showed a high resistance. Mentioned is confirmed by the growth rates which were higher than those in the countries in the competitive environment on the Mediterranean. For this reason, the aim of this paper is to investigate the operations of large hotel companies in Croatia during the economic crisis through the movement of liquidity and solvency ratios. Liquidity is the ability of companies to settle its obligations in the short term. Management or creditors such as banks and suppliers are primarily interested in liquidity of the companies.*

*Effective liquidity management involves planning and controlling the current assets and current liabilities in such way that eliminates the risk of inability to meet short-term liabilities on the one hand, and avoids over-investment on the other side. Solvency of the companies, however, indicates the ability of a companies to settle its obligations in the long term.*

*Solvency is analyzed through financial, capital structure of liabilities and items of assets. For the purpose of this paper a survey was conducted over five hotel companies in Croatia which are listed on the Zagreb Stock Exchange through analysis of their financial statements in the period between 2010 and 2014 year.*

**Keywords:** *hotel companies, financial statements, liquidity, solvency*

### 1. INTRODUCTION

Thanks to its share in the gross domestic product (further: GDP) of 17.2%, tourism is one of the most important industries in the Republic of Croatia. Looking at the competition, especially the Mediterranean countries, tourism in Croatia has a significantly higher share of GDP than this share is in these competitor countries which do not exceed a share of 10%. Although the global economic fallen into economic crisis in 2008, and it consequently reflected in the Republic of Croatia, it can be said that the Croatian tourism showed great resistance in time of crisis. For this reason, the emphasis in this paper is to explore how liquidity and solvency of the companies in the tourism industry were moving in the period from 2010 to 2014. The study was conducted over five hotel companies and listed on the Zagreb Stock Exchange.

## 2. CROATIAN TOURISM IN THE PERIOD FROM 2010 TILL 2014

As already is mentioned, despite reflecting the global economic crisis on Croatia, tourism has shown significant resistance to the negative effects of the global economic crisis by the Croatian economy. If one consider the movement of GDP in the period 2009-2014 year, it can be said that GDP had negative growth rates. So, in 2009 GDP fell by 6.9% in comparison with 2008, in 2010 it fell by 2.3% and in 2011 by 0.2%. In 2012 it was lower by 2.2% compared to 2011. In 2013 it was 1.1% lower than in the previous year and in 2014 in real terms GDP was 0.4% lower than at 2013 (Central Bureau of statistics, 2015).

Foreign currency income from tourism in 2010 amounted to 6.2 milliard euro, which was 200 million euro less than in 2009 (Institute for Tourism, 2011). Looking at the period from 2010 to 2014, the year 2010 is the only year in which the results of tourism were less favourable than in the previous year despite the fact that every year in the period recorded a decline of GDP. Thus, the income from tourism in 2011 amounted to 6.6 milliard, an increase of 6.7% compared to 2010. Revenue from tourism in 2012 amounted to 6.84 milliard euro in 2013, 7.18 milliard euro. In 2014, revenue from tourism totalled 7.4 milliard euro. Also, it is important to note that every year in the observed period is achieved the total growing number of arrivals and overnight stays, noting that in 2012 domestic tourists had a decline in the number of arrivals of 4% (Institute for Tourism, 2015).

In the observed period average daily spending of tourists in Croatia increased. In 2014 it amounted 66.36 euro, of which 55% related to accommodation, 18% on food and drink outside the building for accommodation, 14% on the purchase of the remaining 13% on sports, entertainment, culture and trips. Brits spend the most: 122 euro on average per day. On the second place are the Russians with 99 euro, followed by France (95 euro), the Austrians (72 euro). Below average are the Italians (66 euro), the Dutch (65 euro), Germans (62 euro), Poles (62 euro), etc. (Tomas, 2015). By comparison, the average daily spending of tourists in 2010 was 58 Euros. (Institute for Tourism, 2011).

## 3. LIQUIDITY

In a wider sense of meaning, liquidity is the ability of any form of property that can be transformed in a relatively short time into different form of property without losing its value. In a narrow sense, liquidity is a feature of the property or its individual parts that can be converted fast and without loss into cash that is needed to cover outstanding short-term liabilities. In this case, we talk about the liquidity of resources (Crnković, Tepšić, Hanžeković, 1973., p. 3-5).

Also, it can be said that the liquidity is the company's ability to settle its obligations on time and to satisfy unexpected needs for liquid resources. If a company is not liquid, it operates with difficulty, or there are not enough resources for the procurement raw materials, materials, goods, for payment of salaries and taxes (Žager, Žager, 199, p. 178).

Liquidity ratios are divided into:

- traditional ratios and
- monetary ratios of liquidity.

Traditional ratios of liquidity are:

- current ratio,
- acid test ratio,

- instant liquidity ratio,
- net working capital,
- average response time of charging receivables.

Monetary ratios of liquidity are:

- cash flow ratio,
- ratio of coverage of critical needs,
- ratio of free cash flow 1 and an operating cash flow,
- ratio of free cash flow 2 and an operating cash flow.

### **3.1. Analysis of liquidity of hotel companies listed on the Zagreb Stock Exchange using the traditional ratios of liquidity**

Analysis of financial statements of hotel companies, for the period 2010 - 2014, will be implemented by the use of traditional liquidity ratios except for the calculation of the average time of collection of receivables. Financial statements of five randomly selected hotel companies that are listed on the Zagreb Stock Exchange will be analyzed. They are (in alphabetical order): Hoteli Brela Plc., Hoteli Makarska Plc., Liburnia Riviera Hoteli Plc. Opatija, Maistra Plc. and Riviera Adira Plc. (in 30/09/2014 Valamar Group Plc., Valamar Adria Holding Plc. and Riviera Adria Plc. are connected to the Valamar Riviera Plc.). In the analysis of financial statements the emphasis is placed on the balance sheet which is the basis for financial analysis, analysis of liquidity, indebtedness, activity and profitability (Miljak, 2014, p. 15).

The aim of the research is to prove that companies, which have a current ratio less than 1, have negative net working capital. Also, the aim of this research is to prove that the companies, whose acid test ratio is less than 1, have negative net working capital. In line with this, hypothesis are set as follows:

H1: Companies, whose current ratio is less than 1, have negative net working capital

H2: Companies, whose acid test ratio is less than 1, have negative net working capital.

#### **3.1.1. Current ratio**

As one of the traditional ratios of liquidity, stands out current ratio which shows percentage of short-term assets and short-term liabilities. This ratio shows short-term assets and short-term liabilities, i.e. the relationship between current assets and current liabilities. Current assets is consisted of cash, receivables and financial assets and inventory that will be converted into cash in less than one year from the date of balancing. Current liabilities are accounts payable and short-term loans that must be settled in less than one year from the date of balancing. The ideal value of this ratio is 2.00, which means that short-term assets should be twice the size of short-term liabilities. In this case, it can be said that the company is able to settle its short-term (current) liabilities on time. If the value of this indicator is between 1.00 and 2.00 then points to the questionable liquidity of the company. However, if the company has a value lower than 1.00 it can be said that the company has observed a problem with some of their current liabilities (Miljak, 2012, p. 982-989). A comparison of the firm's current ratio with prior periods, and a comparison with industry averages, will help to determine if the ratio is high or low. Those comparison do not indicate why it is high or low (Gibson, 2013, p. 243.)

Table 1: Calculation of current ratio in the period 2010 – 2014 (authors)

CALCULATION OF CURRENT RATIO					
	2010.	2011.	2012.	2013.	2014.
Hoteli Brela Plc.	0.15	0.11	0.20	0.14	0.32
Hoteli Makarska Plc.	0.74	0.99	3.23	4.74	5.48
Liburnia Riviera Hoteli Plc. Opatija	1.41	1.80	2.15	1.40	1.58
Maistra Plc.	0.05	0.03	0.04	0.02	0.03
Riviera Adria Plc.	0.38	1.45	1.11	1.13	1.09

From Table 1 it can be concluded that in all observed companies amount of current is unfavourable except in Liburnia Riviera Hoteli Plc. in 2012. Also, it can be concluded that during the entire observed period Hoteli Brela Plc. and Maistra Plc. have problems with settlement of their current liabilities. Enterprise Hoteli Makarska Plc. had the same problem in 2010 and 2011 in order to from 2012 was able to settle its short-term liabilities. Liburnia Riviera Hoteli Plc. had questionable liquidity during the whole observed period except in the mentioned 2012.

### 3.1.2. Acid test ratio

Inventory is removed from current assets when computing the acid-test ratio. Some of the reason for removing inventory are that inventory may be slow-moving or possibly obsolete, and parts of the inventory may have been pledged to specific creditors (Gibson, 2013, p. 244). This ratio shows companies' ability to pay current obligations with the most liquid asset and it's calculated as the difference in short-term assets and inventories with short-term liabilities. The ideal ratio value is 1.00 which means that the company is able to comply its current obligations on time. Extremely high value of this indicator suggests that it is necessary to improve cash management to reduce excess cash or to reduce short-term assets in favour of long-term (Miljak, 2012, p. 982-989).

Table 2: Calculation of acid test ratio in the period 2010 – 2014 (authors)

CALCULATION OF ACID TEST RATIO IN THE PERIOD					
	2010.	2011.	2012.	2013.	2014.
Hoteli Brela Plc.	0.11	0.09	0.17	0.11	0.29
Hoteli Makarska Plc.	0.56	0.78	3.01	4.66	5.40
Liburnia Riviera Hoteli Plc. Opatija	1.36	1.75	2.06	1.35	1.53
Maistra Plc.	0.04	0.03	0.03	0.02	0.03
Riviera Adria Plc.	0.36	1.42	1.07	1.1	1.05

The company Liburnia Riviera Hoteli Plc. Opatija is only able to comply on time its current obligations throughout the observed period. Riviera Adria Plc. in 2010 couldn't comply with its current obligations on time that would also be able to do so from 2011 onwards. Enterprise Hoteli Brela Plc. had an extremely low acid test ratio and wasn't able to comply its current obligations on time.

### 3.1.3. Net working capital

This ratio represents the difference between current assets and current liabilities and provides information about the amount of capital that is available to meet current obligations and to cover extraordinary expenses. If the value of ratio is 0, then it can be said that the company is marginally liquid. If the value is greater than 0, the company is liquid and for amounts less than 0 it can be said that the company is not liquid.



Table 3: Calculation of net working capital in the period 2010 – 2014 (authors)

<b>CALCULATION OF NET WORKING CAPITAL IN THE PERIOD 2010 – 2014</b> <b>(in kunas)</b>					
	<b>2010.</b>	<b>2011.</b>	<b>2012.</b>	<b>2013.</b>	<b>2014.</b>
Hoteli Brela Plc.	-41.097.079	-44.194.341	-26.053.778	-34.933.705	-29.386.171
Hoteli Makarska Plc.	-3.089.803	-47.910	9.729.633	17.362.775	21.903.100
Liburnia Riviera Hoteli Plc. Opatija	13.523.382	29.526.044	37.837.511	20.591.224	35.194.761
Maistra Plc.	-983.035.000	-1.032.574.314	-919.356.399	-897.591.637	-979.310.551
Riviera Adria Plc.	-119.171.442	57.572.806	23.624.969	31.037.259	19.129.252

During the entire observed period companies Hoteli Brela Plc. and Maistra Plc. aren't liquid. The only company, which was liquid throughout observed period, is Liburnia Riviera Hoteli Plc. Opatija.

### 3.1.4. Instant liquidity ratio

The ratio of current liquidity shows how much is coverage of short-term liabilities with short-term liquid assets or financial resources and it's been calculated as the ratio of cash and short-term liabilities. The value of this the ratio shouldn't be less than 0.10. If the ratio is higher, it is considered that is liquidity of the company is better (Miljak, 2012, p. 982-989).

Table 4: Calculation of instant liquidity ratio in the period 2010 – 2014 (authors)

<b>CALCULATION OF INSTANT LIQUIDITY RATIO</b>					
	<b>2010.</b>	<b>2011.</b>	<b>2012.</b>	<b>2013.</b>	<b>2014.</b>
Hoteli Brela Plc.	0.01	0.02	0.01	0.02	0.06
Hoteli Makarska Plc.	0.13	0.28	2.12	3.92	4.28
Liburnia Riviera Hoteli Plc. Opatija	1.08	1.54	1.81	1.22	1.39
Maistra Plc.	0.01	0.01	0.01	0.01	0.01
Riviera Adria Plc.	0.27	1.23	0.92	0.93	0.89

The coverage of short-term liabilities with liquid short-term assets is extremely unfavourable for companies Hoteli Brela Plc. and Maistra Plc. while for the other companies is favourable.

## 4. SOLVENCY

Solvency measures the ability of an enterprise to survive over a long period of time (Weygandt et.al., 2005, p. 54.) ). Solvency is the ability of the company that in the long term meet its obligations. To minimize the company's risk of doing business with over-indebted companies, it is important to rate credit worthiness before business cooperation. The aim of credit worthiness rate is to demonstrate whether the observed company is insolvent (it has no ability to pay its obligations), or was over-indebted. If the observed company is not insolvent and is not over-indebted, doing business with such a company minimizes the risk.

Solvency ratios are:

- debt to assets ratio,
- debt equity ratio,
- long-term liabilities to net worth ratio,
- interest coverage ratio.

For an analysis of the solvency of hotel companies ratios above will be used except interest coverage ratio.

#### 4.1. Analysis of solvency of hotel companies listed on the Zagreb Stock Exchange using the ratios of solvency

Analysis of financial statements of hotel companies, for the period 2010 - 2014, will be implemented by the use of solvency ratios. As with liquidity, financial statements of five randomly selected hotel companies listed on the ZSE will be studied (Zagreb Stock Exchange, 2015). These are (in alphabetical order): Hoteli Brela Plc., Hoteli Makarska Plc., Liburnia Riviera Hoteli Plc. Opatija, Maistra Plc. and Riviera Adria Plc.

The aim is to show that there is a connection between total liabilities to net worth ratio and debt to assets ratio. In line with this, hypothesis is set as follows:

H3: Companies, which have debt to assets ratio greater than 50%, have total liabilities to net worth ratio greater than 35%.

##### 4.1.1. Debt to assets ratio

This ratio represents the proportion of total liabilities and total assets. The importance of the ratio is that it points to the fact how much the assets is financed from company's own and how much by external sources. The higher the level of debt to assets ratio is, the risk of investments is higher, i.e. the business with that company. An acceptable value of the ratio is to 50%, which means that half of the companies passive is made with obligations and the other half with the capital.

Table 5: Calculation of debt to assets ratio in the period 2010 – 2014 (authors)

CALCULATION OF DEBT TO ASSETS RATIO (in %)					
	2010.	2011.	2012.	2013.	2014.
Hoteli Brela Plc.	61	32.79	29.77	25.12	26
Hoteli Makarska Plc.	21.42	21.61	15.93	14.10	12.67
Liburnia Riviera Hoteli Plc. Opatija	12.44	9	7.52	18.79	18.94
Maistra Plc.	53.43	52.43	48.11	48.49	48.01
Riviera Adria Plc.	24.49	19.38	41.89	34.44	35.04

From Table 5 it can be concluded that companies Hoteli Makarska Plc., Liburnia Riviera Hotels Plc. Opatija and Riviera Adria Plc. throughout the observed period had a favorable debt to assets ratio, ie. obligations are made up less than half of total passive. Unfavorable debt to assets ratio had companies Hoteli Brela Plc. in 2010 and Maistra Plc. during 2010 and 2011.

##### 4.1.2. Debt equity ratio

This ratio represents the proportion of total liabilities and equity. This ratio should be no greater than 1 because it would then mean that the total liabilities amount to more than the company's capital.

Table 6: Calculation of debt equity ratio in the period 2010 – 2014 (authors)

CALCULATION OF DEBT EQUITY RATIO					
	2010.	2011.	2012.	2013.	2014.
Hoteli Brela Plc.	0.26	0.50	0.43	0.34	0.35
Hoteli Makarska Plc.	0.27	0.24	0.19	0.16	0.14
Liburnia Riviera Hoteli Plc. Opatija	0.14	0.10	0.08	0.23	0.24
Maistra Plc.	1.15	1.19	1.01	0.97	0.94
Riviera Adria Plc.	0.33	0.24	0.65	0.54	0.56

By analyzing the debt equity ratio is determined that the at the company Maistra Plc. the amount of total liabilities is higher than equity during almost the entire observed period. During 2014 there was a significant reduction in the amount of total liabilities according to equity.

#### 4.1.3. Long-term liabilities to net worth ratio

This ratio is calculated by putting in proportion long-term liabilities and equity. The ideal value of this ratio is 30-35%.

*Table 7: Calculation of long-term liabilities to net worth ratio  
in the period 2010 – 2014 (authors)*

<b>CALCULATION OF LONG-TERM LIABILITIES TO NET WORTH RATIO</b>					
	<b>(in %)</b>				
	<b>2010.</b>	<b>2011.</b>	<b>2012.</b>	<b>2013.</b>	<b>2014.</b>
Hoteli Brela Plc.	40.52	30.37	31.04	19.80	19.75
Hoteli Makarska Plc.	21.40	19.25	16.98	14.36	12.68
Liburnia Riviera Hoteli Plc. Opatija	10.78	6.11	4.49	18.04	17.59
Maistra Plc.	1.13	1	1	7.68	4.83
Riviera Adria Plc.	17.16	16.69	52.79	40.22	43.98

Company Hoteli Brela Plc. in 2010 has an unfavourable long term liabilities to net worth ratio while the same ratio is favorable in the period from 2011 to 2014. Riviera Adria Plc. in 2012 has a favourable ratio while this ratio in later years is unfavourable.

## 5. RESEARCH RESULTS

Considering that the tourism showed great resistance in relation to the economic crisis, the aim of the paper was to investigate the movement of liquidity and solvency of large hotel companies in Croatia which are listed on the Zagreb Stock Exchange for the the period from 2010 to 2014. For the study three hypotheses were formed.

Aim of the first hypothesis was to show that companies, whose current ratio is less than 1, have negative net working capital. After examining the results it can be concluded that the stated hypothesis is confirmed. In the entire observed period Hoteli Brela Plc. have a current ratio less than 1 and a negative net working capital. Current ratio of Hoteli Makarska Plc. in 2010 and 2011 is less than 1 and Hoteli Makarska Plc. have a negative net working capital. In 2012, 2013 and 2014, Hoteli Makarska Plc. has a current ratio higher than 1 and therefore a positive net working capital. Maistra Plc. has, during the whole observed period, current ratio less than 1 and a negative net working capital. Riviera Adria Plc. had in 2010 current ratio of less than 1 and a negative net working capital. In the coming years the current ratio is greater than 1 and thus net working capital is positive.

Aim of the second hypothesis was to prove that the company, whose acid test ratio is less than 1, have negative net working capital. After examining the results it can be concluded that the stated hypothesis is confirmed. Hoteli Brela Plc. and Maistra Plc. throughout the observed period have acid test ratio less than 1 and a negative net working capital. Hoteli Makarska Plc. and Riviera Adria Plc. have negative net working capital in the years in which their acid test ratio is lower than 1.

The aim of the third hypothesis was to prove that the companies, which have debt to assets ratio greater than 50%, have total liabilities to net worth ratio greater than 35%.

After examining the results it can be concluded that the stated hypothesis is rejected. Maistra Plc. in 2010 and 2011 has debt to assets ratio higher than 50% while at the same time has a total liabilities to net worth ratio 1.13, i.e. 1%.

## 6. CONCLUSION

Although tourism, as a significant industry in Croatia, showed great resistance to the economic crisis, which resulted in an increase in the number of tourist arrivals and tourism revenues in the period from 2011 to 2014, it can not be said that these facts were sufficient for the favourable

status of liquidity and solvency ratios of the observed companies. During 2010 and 2011 all observed companies had questionable liquidity. The reason for the that fact is that those two years are those in which the crisis has had major consequences to the Croatian economy and the economy of the countries of targeted markets. Croatian tourism, which has been increasing steadily, in 2010 had poorer results than in 2009.

Company, which has the most favourable ratios of liquidity and solvency, especially in the period 2012 - 2014 is Liburnia Riviera Hoteli Plc. Opatija. During this period all liquidity ratios are higher than the minimum desirable value while all the solvency ratios are less than the maximum acceptable value. The main reason is staff reductions, restructuring and renovation of facilities. Thanks to the committed actions, gross profit of the company grew by slightly more than 7 times in the last three years. Example of Liburnia Riviera Hoteli Plc. Opatija indicates which direction should go and other companies to improve their business results.

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## IDENTITY AND BRANDING OF EU CITIES – INVESTIGATING ATTITUDES OF CROATIAN STUDENTS

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### ABSTRACT

*City branding, as well as its long-term marketing strategy, is a challenge for cities which already have strong image, as well as for those who still need to build it. In the process of branding, cities promote themselves as places good for living and as a desirable tourist destination, at the same time seeking to attract significant investments. Brands are the basis of long-term survival for every company in the market, including the cities. Creating and building strong brands requires a clear definition of brand identity and its positioning in the minds of consumers (Paliaga, 2007, 45). Marketing activities result in increased brand equity, and in the case of cities, we talk about the growth of their market recognition, and thus their image. Conducting marketing activities to build a city brand, we highlight its perceived strengths on which we want to build growth. The Creative City Index, developed by Charles Landry and Jonathan Hyams, evaluates the 'creative pulse of places' by exploring their urban dynamics, processes and achieved projects. It looks at the city as an integrated whole, including economic, cultural, technological and social factors, where the dynamics interweave either reinforcing or counteracting each other (Landry, 2014). Competition among cities is expressed most strongly in the field of attracting new investments and jobs. It manifests through two levels, in the global market cities are competing to attract the headquarters of new international companies, while in the national market they compete for resources and incentives from various funds, in order to invest into infrastructure, as well as cultural, economic and other development projects. The main goal of this Paper is to investigate the image of European city brands and their emotional impact on Croatian students from all university regions in Croatia as authors target research group. In order to find out their preferences, authors will conduct a quantitative research. Authors will also focus on whether or not some of Croatian cities would be included in their list of brands.*

**Keywords:** *city branding, Croatian students, competition, image, market*

### 1. INTRODUCTION AND LITERATURE REVIEW

There is no one accepted definition of a brand. Today, brands are measured through the experience they deliver, from the emotional connection they make to how far they create sustainable business value. (FutureBrand, 2016). Brands represent a set of tangible and intangible values of the product for its users, but in terms of cities, regions and states they act as a certain label, which summarizes all of our expectations, thoughts, beliefs, knowledge,

feelings and associations that we already have in our minds about a specific state, a city or a region (adapted from Paliaga, 2008).

Gren (1992) and Ashworth & Voogd (1990) have wrote about place marketing from the early 1990s. Today's leading texts on place marketing (also Gold & Ward 1994: 9) have been published in the series of "Marketing Places" by Philip Kotler et al. (1993, 1999) (Rainisto, 62) Places can be branded like products and services (e.g. Kotler *et al.* 1999; Keller 1998: 19; Killingbeck & Trueman 2002; Hankinson 2001). Place branding in place marketing aims especially at increasing the attractiveness of a place. Relevant areas of study regarding place branding have been urban planning, retail marketing and tourism marketing (Hankinson 2001: 128-129; Morgan et. al. 2002). Place branding brings added attraction to a place, the central issue being to build the brand identity of a place (Rainisto 2001). When geographical locations are branded like products and services, the brand name is then often the actual name of the location. A branded place makes people aware of the location and connects desirable associations (also Keller 1998:19). Places comprise many components, such as name, symbols, packaging and reputation (Shimp 2000).

According to Vicente (2004), branding cities is a part of strategic marketing that aims to promote the image of the city, its products, tourism and attract investment. At the same time, marketing of cities today constitutes one of the aspects of spatial development (Rainisto, 2003). A brand of a city enables its description, interpretation and connections with specific characteristics, values and emotions. The city brand represents its meanings on different levels, from phisical to emotional, psychological (Paliaga, 2008, 9). The best city brands are actually successfull because they manage to achieve synergy in building an emotional connection between them and their target groups (Williams et al, 2004, 6 from Paliaga, 2008)

The starting point for applying the concept of branding the cities is that the name of a city becomes a brand. As a result, the brand creates a psychological image in the minds of its target groups (potential investors, tourists, citizens, businessmen), helping them to assess the city's products and services, facilitating the tourists to make their decisions on the visit, affecting business decisions, influencing the residents' decision on relocating, etc.

For the past 8 years, FutureBrand has published a report on the subject of Country Branding the Country Brand Index (CBI) - that measures and ranks countries on the strength and power of their nation's brand. As part of the research, it has become increasingly important to understand the power and value of 'Country of Origin'. According to FutureBrand (2014) the reputation of a country and the relationship between the product and the country's expertise was originally the ultimate reason to buy the product. Today, things have changed. Consumers understand that legal and safety issues are equally as important. As a result of the 2013 'Horsemeat scandal', all packaged products must now indicate the country or countries of origin of all production stages. This demonstrates that origin is more than ever an expression of quality and is crucial information for the consumer. Products or services that are well known in the market also have huge influence on the concept of national branding and consequently may affect city brands recognition.

Hankinson (2001, 129) comments that 'in contrast to the marketing of locations, there are relatively few articles to be found in the academic literature with regard to the promotion of locations as brands. Trueman et al. (2001) recognise that there is an urgent need for a robust analysis of the city as a brand that takes into account a wide range of stakeholders. While some cities already have strong and recognizable brands, many cities and states worldwide take actions in their branding, in order to increase their competitiveness in the global market. They try to present their cities and states in a powerful, attractive and different way, and this activity is very similar to the marketing of products and services. Cities and even countries take efforts

in branding primarily to attract high-tech companies, venture capital, tourists and skilled workforce. Therefore, the governments of many countries, and now even leadership of large cities deal with the reputation, image and identity of the country, struggling to attract investment, tourists, an increase in exports and the like (Paliaga, 2008, 10).

Graham (2002) makes a distinction between two parallel cities that exist simultaneously. The first is the 'external city', 'which can, at least superficially, be encapsulated in one or two signature buildings or landmarks'. The second parallel city described by Graham (2002: 1011) is the 'internal city', the city of the mind. It is possible to describe the 'internal city' as the subjective image created in our minds, according to each individual's experiences and priorities. The two parallel cities exist simultaneously, overlap and interact. The crucial point for the management and marketing of the city is this point of interaction. The point of interaction is the perception of the city, as formed by each individual that comes to encounters with the city. It is the city's image (Kavaratzis, 2004). Sevin (2014) argues that place-relevant associations might be highly influenced by certain high-profile events, that is why researchers need to be careful about differentiating between long-term place associations and short-term event influences, as well as how these short-term events influence long-term associations. This is also the case with growing terrorism. There are several measurement practices and studies using various methods such as quantitative perception surveys (Anholt, 2006), interviews gathering qualitative data (Laaksonen, Laaksonen, Borisov, & Halkoaho, 2006), concept maps (Brandt & de Mortanges, 2011), repertory grid analysis (Hankinson, 2004), and importance satisfaction analysis (Insch, 2010). Even though several of these models have shown various levels of success, it is not possible to argue that they present a comprehensive model in which we can measure place brands.

According to Simon Anholt (2003, 213), cities have always been brands. Simon Anholt, a practitioner who is often credited in coining the term 'nation branding', started the Nation Brands Index in 2005 and partnered up with GfK in 2008 (Anholt, 2011). Following the commercial success of Nation Brands Index, Anholt started the Anholt-Global Marketing Institute (GMI) City Brands Index. The reputation of cities has been driven by their governments throughout history. Anholt believes that in addition to its economic strength, wealth and development, the city brand should also be developed in directions such as creativity, music, philosophy, confidence, wisdom, challenge and safety. The city will be able to use and benefit its strengths and weaknesses only in one condition, and that is to create such an organizational structure that will link people and resources in a harmonious unity, as an optimal way to use all available forces (adapted from Kotler et al., 1993).

Measuring brand value is an important task and it enables brand managers to plan their strategic decisions. Keller (2000) introduced the Brand Report Card in which brand managers are asked to score their brands against 10 pre-determined facets, and later presented a Brand Tracking model, which provides a practitioner approach to brand building (Keller, 2003). This model consists of a brand pyramid which starts with "salience" at the base (to define awareness and identity), and moves through "performance", "imagery", "judgements" and "feelings", towards "resonance", denoting the relationship with the brand. The destination brand literature has complimented these typologies, often with more specific brand attributes that include the physical environment, weather and food (Embacher and Buttle, 1989), or the creation of a geographical marketing mix (Ashworth and Voogt, 1989) focusing on promotion, spatial-functional measures, organisational measures and financial aspects, whilst Kotler et al (2002) have developed a model of place improvement which embraces place as a character, the fixed environment, service provision and the entertainment or recreational value. Hubbard and Hall

(1998) further include aspects such as cultural regeneration, large-scale physical redevelopments and mega events. Anholt on the other hand, has developed both a destination brand hexagon (Anholt, 2005) and a city brand hexagon comprising six Ps: Presence (familiarity and contribution to world culture), Place (physical aspects), Potential (economic and educational opportunities), Pulse (vibrancy), People (and cultural alignment) and Prerequisites (living standards and amenities) (Anholt, 2006). Vandewalle (2008) used brand building models in an attempt to explore the impact of the Liverpool campaign as European Capital of Culture 2008 on the re-branding of Liverpool, by assessing perceptions taken from the local and surrounding population. Brand building models seek to identify (and assess) the various dimensions of brands and whilst the fact that brands are multi-dimensional is not in question, according to Vandewalle, which facets are assessed remains an issue, because whichever facets of the brand are evaluated, other components will have been omitted. So he comes to a conclusion that the holistic nature of the brand will never be fully captured by these techniques. Furthermore, he proposes instead an attempt to identify and emphasise the key components in the brand building process. Awareness is clearly one of these: we cannot make judgements about a brand unless we are aware of it. Overall Brand Judgement is therefore a second key component in brand building (and is the sum of brand performance, image, feelings and so on). Indeed, gaining an emotional bond with the brand is seen as an important milestone in the brand building process. This then, leads to a third key facet, Brand Resonance, which determines to what extent we take the brand with us.

In the long run, the most competitive cities in international terms are those offering the best quality of life to their inhabitants (Sánchez, 1997). Cities that were once industrial are restructured for the service economy. The economy of cities as a whole must be competitive internationally. Powerful communication infrastructures and logistics zones, based on telecommunications have been seen to be invaluable for success (Borja & Castells, 1997: 14, 252). City branding provides, on the one hand, the basis for developing policy to pursue economic development and, at the same time, it serves as a conduit for city residents to identify with their city. In this sense the relevance of and need for a framework describing and clarifying the processes involved in city branding are equally strong for facing increasing competition for resources, investment and tourism on the one hand and for addressing urgent social issues like social exclusion and cultural diversity on the other (Kavaratzis, 2004, 58).

## 2. METHODOLOGY

The main goal of this Paper is to investigate the image of European city brands and their emotional impact on Croatian students from all university regions in Croatia as authors target research group. In order to find out their preferences, authors will conduct a quantitative research. Authors will also focus on whether or not some of Croatian cities would be included in their list of brands. This paper's findings are based on primary research of branded European cities, or city brands, that have the highest brand awareness among Croatian students (faculty level). Anonymous research was conducted using the sample of 356 students that attend one of 4 main Croatian universities in Croatia (Universities of Zagreb, Osijek, Rijeka and Split) during the time frame of approximately 1 month, between March and April 2016. The questionnaire consisted of the questions below:

1. Which European city first comes to your mind?
2. Which 3 associations of that city first come to your mind?
3. Have you already visited that city?

Demographic questions: age, sex.



## 2.1. Research questions and hypothesis

Based on the research questions, authors will confirm or reject research hypothesis below:

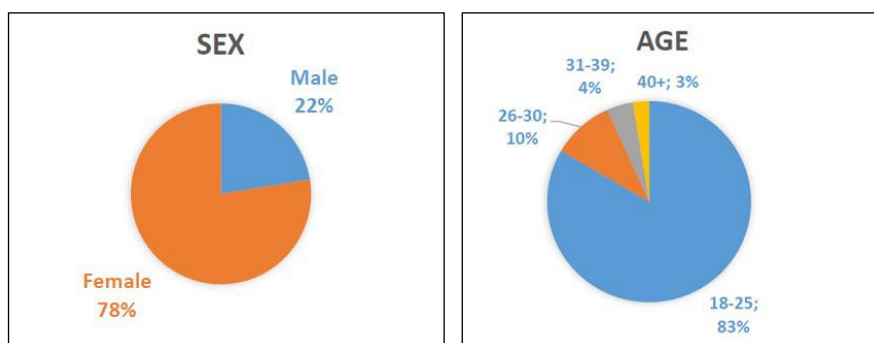
1. (H1), Main hypothesis: The cities that mostly come to students' minds (top 5) have mostly the same, repeated associations, with variance less than 25% in average.
2. (H2) More than 75% of surveyed Croatian students, when thinking about European cities, first think about a foreign European city, rather than Croatian one.
3. (H3) More than 50% of students surveyed have not been to the city that first came to their mind.
4. (H4) More than 25% of students surveyed mentioned the same European city that first came to their mind.
5. (H5) More than 50% of students surveyed mentioned the top 5 cities in this research.

Using master hypothesis authors will confirm or reject the statement that the strongest city brands (highly branded cities) in most cases have just a few extremely branded associations that are widespread among students' minds.

Authors are aware of the potential seasonality of the results, since the time frame was relatively short to conduct the survey. The same type of research would be more representative if conducted during all 4 weather seasons (winter, spring, summer, autumn). They are also aware of short-term event influences, including the present fear of terrorist attacks in European countries which can appear as negative associations for some city brands.

## 3. RESEARCH RESULTS

Primary research was conducted between March and April 2016, using the sample of 356 faculty students among all major Universities in Croatia. The sample can be considered as representative. Sampled demographics are shown in chart 1 (sex) and chart 2 (age).



*Chart 1: Sample demographics - sex*

*Chart 2: Sample demographics - age (Authors' primary research results)*

The cumulative list of mentioned European cities in this research is shown in table 1.

*Table following on the next page*

Paris	Istanbul	Luxemburg
London	Milano	Monte Carlo
Vienna	Venice	Mostar BIH
Berlin	Vinkovci CRO	Napoli
Zagreb CRO	Athens	Nice
Barcelona	Basel	Rostock
Prague	Bremen	Skopje
Amsterdam	Dubrovnik CRO	Stockholm
Lisboa	Edinburgh	Stuttgart
Rome	Hamburg	Trieste
Budapest	Helsinki	Wroclaw
Brusseless	Karlovac CRO	Zadar CRO
Munchen	Kiev	Zurich
Split CRO	Osijek CRO	
Dublin	Kopenhagen	

Table 1. Cities mentioned by surveyed students (Authors' primary research)

The dispersion by frequencies follows in chart 3.

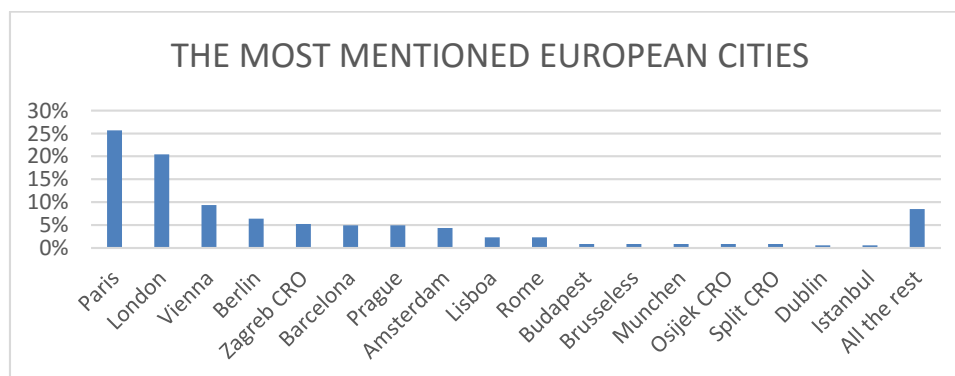


Chart 3: Frequency of mentioned European cities (Authors' primary research results)

### 3.1. Research Hypothesis results:

**H1:** The cities that mostly come to students' minds (top 5) have mostly the same, repeated associations, with variance coefficient less than 25% in average, meaning that  $\frac{3}{4}$  of all associations mentioned are roughly the same.

**Research conclusion: H1 is rejected.** The average variance coefficient between top 5 mentioned cities is 65,8 %, which is almost the opposite of H1 (variance is  $\frac{3}{4}$  instead of  $\frac{1}{4}$ ). Interestingly enough, the only partial exception to this conclusion is the city of Paris, with its Eiffel tower as the most mentioned (and branded) association out of all other associations combined together, as shown in the chart 4. No other mentioned city has as strong association as the Paris's Eiffel tower, to be the most frequently mentioned. When it comes to Croatian faculty students, the Eiffel tower is, by far, the most branded European tourist association.

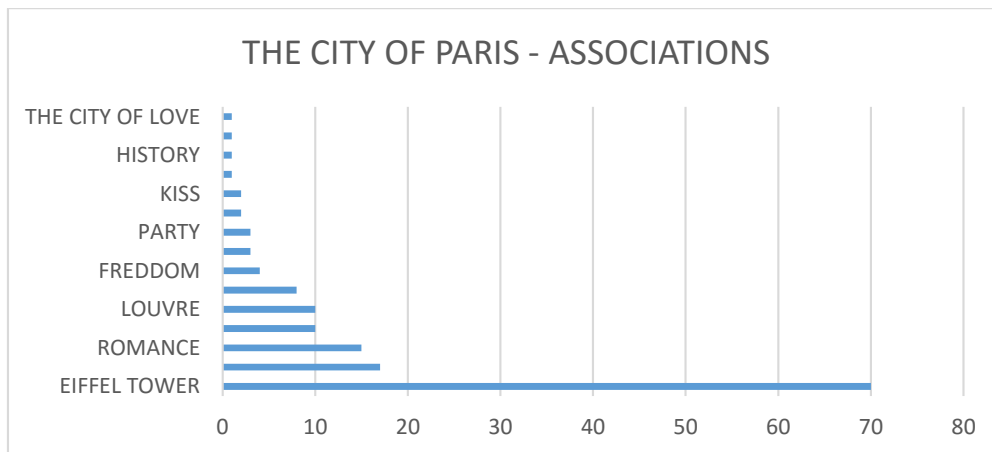


Chart 4: Associations for Paris, France (Authors' primary research results)

PARIS	LONDON	VIENNA	BERLIN	ZAGREB
EIFFEL TOWER	BIG BEN	ADVENT	BERLIN WALL	HOME TOWN
LOVE	LONDON EYE	CASTLES	PARTY	MAIN SQUARE
ROMANCE	RAIN	ARCHITECTURE	BICYCLES	ZRINJEVAC PARK
FASHION	QUEEN	HISTORY	MONEY	JARUN LAKE
LOUVRE	THAMES	CULTURE	BUSINESS	STUDYING
TERRORISM	KINGDOM	BEAUTY	ARCHITECTURE	CHILDHOOD
FREDDOM	PHONE BOOTH	MOZART		CULTURE
FOOD	RED COLOR	DONAU		SLJEME MOUNTAIN PEAK
PARTY	RED BUS	EXCURSION		
LIGHT	CULTURE	HANDBALL		
KISS	FASHION	CITY FAIR		
PARKS	PARKS			
HISTORY	SITSEEEINGS			
WINE	AMUSEMENT			
THE CITY OF LOVE				
Association variance coefficient				
26%	94%	67%	66%	76%
Average variance coefficient: 65,8%				

Table 2: Associations for top 5 mentioned cities (Authors' primary research results)

**H2:** More than 75% of surveyed Croatian students, when thinking about European cities, first think about a foreign European city, rather than a Croatian one.

**Research conclusion: H2 is accepted.** Roughly 80% of surveyed students mentioned foreign European city as the first city that came to their mind (chart 5).

**H3:** More than 50% of students surveyed have not been to the city that first came to their mind.

**Research conclusion: H3 cannot be accepted.** Although authors were quite close to assumption, the result literally showed a tie (50:50 – chart 6) between visited and not visited mentioned city per student. This means that H3 does not have to be rejected, but also it cannot be pre-assumed. The decisive conclusion could not be made.

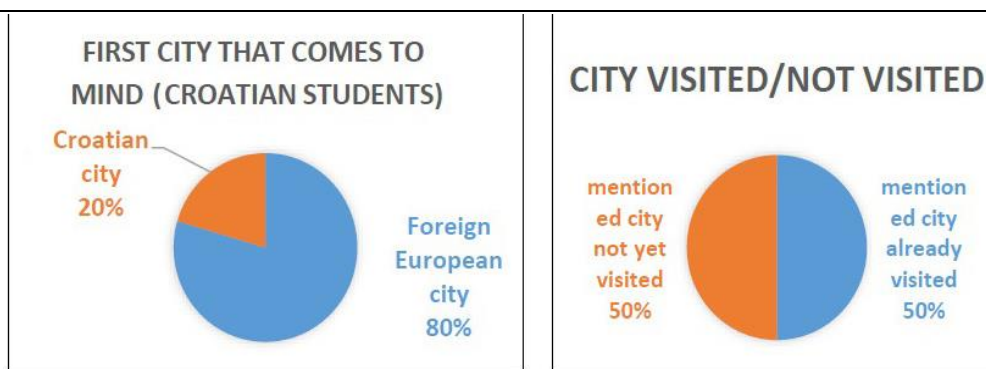


Chart 5: Croatian VS foreign cities that first come to mind

Chart 6: Visited VS not visited cities (Authors' primary research results)

**H4:** More than 25% of students surveyed mentioned the same European city that first came to their mind.

**Research conclusion: H4 is rejected.** Although quite close to 25% (24%), the city of Paris is the most mentioned (the most branded) European city, as seen in chart 7. The second most mentioned city (London) was mentioned among 20% of surveyed students, while the third most mentioned city (Vienna) was mentioned among 9% of surveyed students. In total, the three most mentioned cities add up to 53% of all mentioned European cities cumulative.

**H5:** More than 50% of students surveyed mentioned the top 5 cities in this research.

**Research conclusion: H5 is accepted.** The top 5 European cities have been mentioned among 67% of surveyed students, while all the other cities only 33% in cumulative (chart 8).

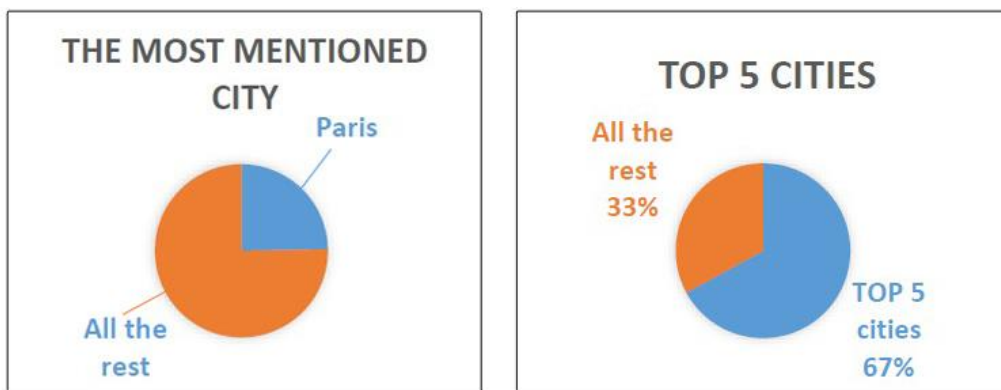


Chart 7: Most mentioned city

Chart 8: Top 5 mentioned European cities vs all the rest mentioned European cities (Authors' primary research results)

#### 4. CONCLUSION

The main goal of this Paper was to investigate the image of European city brands and their emotional impact on Croatian students from all university regions in Croatia, as authors' primary target research group. Research survey was conducted between March and April 2016, with the sample of 356 faculty students. Based on the research questions, 5 research questions were to be answered. The first hypothesis (H1-The cities that mostly come to students' minds have mostly the same, repeated associations, with variance less than 25% in average) was

rejected: The average variance coefficient between top 5 mentioned cities is 65,8%, which is almost the opposite of H1. Interestingly enough, the only partial exception to this conclusion is the city of Paris, with its Eiffel tower as the most mentioned (branded) association out of all other associations combined together. The second hypothesis (H2-More than 75% of surveyed Croatian students, when thinking about European cities, first think about a foreign European city, rather than Croatian one) was accepted. Roughly 80% of surveyed students mentioned foreign European city as the first city that came to their mind. The third hypothesis (H3-More than 50% of surveyed students have not been to the city that first came to their mind) could not be accepted. Although authors were quite close to assumption, the result literally showed a tie (50:50) between visited and not visited mentioned city per student. The fourth hypothesis (H4-More than 25% of students mentioned the same European city that first came to their mind) was rejected. Although actually close to 25% (24%), The city of Paris is the most mentioned European city. The second most mentioned city (London) was mentioned among 20% of surveyed students, while the third most mentioned city (Vienna) was mentioned among 9% of surveyed students. In total, the three most mentioned cities add up to 53% of all mentioned European cities cumulative. The fifth hypothesis (H5-More than 50% of surveyed students mentioned the top 5 cities in this research) was accepted. The top 5 European cities have been mentioned among 67% of surveyed students. For future work, authors plan to investigate which are the most branded Asian cities among Croatian faculty students. The main limitation of the research is the relatively short time frame for the survey with possible short-term event influences.

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## WOMEN EMPOWERMENT AND ECONOMIC DEVELOPMENT IN IMO STATE, NIGERIA

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### **ABSTRACT**

*The study examined the relationship between women empowerment and economic development in Imo State, Nigeria. The study adopted a descriptive research design. Three hundred and eighty-eight women were sampled using Taro Yamane formula from a total population of twelve thousand, seven hundred and twenty-five women. Questionnaire was the research instrument used for data collection. Data were analyzed using frequency distribution and percentages for presenting and analyzing the data collected. The findings revealed among others that the ability of the governmental and non-governmental agencies to articulate effective women empowerment programmes have not significantly promoted economic development in Imo State and also that gender inequality does not significantly enhance women empowerment and economic development in Imo State. These findings are evidenced by responses from respondents on women in politics and decision-making, access to credit facilities, income generation, commerce, skills acquisition and other sectors of women empowerment. Based on the findings, it was recommended that the Nigerian government should provide an enabling ground for Nigerian women to rekindle their hope and faith in the ability of the system to provide for its people irrespective of sex, age, ability, religious inclination and other mundane considerations.*

**Keywords:** *Women, empowerment, economic development, Imo State*

### **1. INTRODUCTION**

In Nigeria today, women have limited access to socio-economic rights and privileges. They enjoy lower social status and are encumbered by harmful traditional practices to exhibit their potentials. They still suffer discrimination and marginalization through denials of rights, land ownership, access to credit facilities and farm input. Women are isolated, abused and restricted at the community levels through traditional and religious practices which hamper development. Report shows that the major institutional constraints in women's participation in economic activities and development process in societies are inadequate access to factors of production and trade, lack of credit facilities, lack of training opportunities and skill acquisition, limited access to appropriate production technologies and social services (Agwu, 2001).

Women in Nigeria are unable to secure credit facilities from financial institutions due to lack of collateral. In most of the developing countries, 30% of women receive less than 1% of the total credit given annually (Asogwa, 2005). This development has resulted to the increasing insecurity in income on the part of women. Experience has shown that majority of women especially those in rural communities do not benefit from the programmes of the various governments even when they are involved in economic activities that need support.

However, despite the arduous tasks carried out by women in the society and their various homes, women are disadvantaged sex in Nigeria according to Nzeribe (2008) because few among them have secured paid job; they do not have equal responsibilities for decision making as men. Only 7.3% of women are members of the Nigeria Federal Legislative House (World Development Report, 2011); there is violence against women in the society (Angya, 2009). A lot of women are used for rituals. In some cultures, teenage female children (the virgins) are used to appease gods while women are forced to carry calabash and other materials for sacrifices to gods; they are fully engaged in agriculture. In some cultures, while women go to farm to



cultivate, men sit at home waiting for women to feed them with the proceeds from such farming activities; they do not have right to inherit properties in some cultures; they are regarded as witches at home. There is a belief that the more a woman becomes aged, the most likely she is regarded as a witch; many female children who are used as house helps are subjected to inhuman treatments by their masters; some are often raped by the overzealous masters.

A lot of women are also working as attendants in cafeteria, restaurants and other non-economically viable places. Such women are thus subjected to indecent lives in abject poverty; many cultures in Nigeria subject widows to harrowing experiences as revealed by (UNICEF, 1995, cited in Utulu, 2009). They face harsh treatments during widowhood. Their hairs are often shaved, forced to sleep on bare floor, cry for days and made to wear black clothes. They are incarcerated for months to mourn their departed husbands. Some women are also forced to drink concoction and swear to oath, to prove their innocence when circumstances surrounding the death of their husbands are controversial; due to poverty, some do engage in commercial sex to make ends meet. Many are exported to foreign countries to attract international clients as prostitutes. Consequently, they are often prone to the vulnerability of HIV/AIDS diseases; many are victims of rape and sexual abuse, female genital mutilation, wife battering, women trafficking; and they are subjected to inhuman treatments from entrusted husbands such as divorce and assault (Ochonogor, 2005).

Therefore, the world has recognized the role of women in the economic development of the society and this has necessitated the meeting of leaders of 189 countries in the world at the United Nations Millennium Summit, held from 6th–8th September, 2000 at New York to endorse the Millennium Development Goals framework for women empowerment. Nigeria being a signatory to the declaration has over the years been making efforts to achieve the goals before the year 2015. Thus, these goals can be effectively pursued, achieved and sustained through empowering women socio-culturally, economically and politically. The woman is a bastion of potentialities. It was cognizant of the above that the study is designed to unravel issues of women empowerment and economic development in Nigeria drawing largely from empirical evidence in Imo State.

Globally, women have been described as an invaluable gift to mother earth. In fact, their cardinal role within and outside the family cannot and will not be disputed. No word can be uttered on humanity without reference to women. Therefore, it is pertinent to say that women are fundamental and instrumental in the equation of human existence. Imagine a world without women! It would be simply hell on earth. Women's laudable roles in human existence have left indelible prints in human history.

Thus, to underscore this crucial role women play, the United Nations set aside every March 8 as "International Women's Day" to celebrate the social, political and economic achievements of women. The theme of this year's celebration was: 'Inspiring Change'. Obviously, women have inspired change, not only in their families, but also in politics and governance. Of course, many homes wouldn't have been what they are today if not for the assiduous and judicious efforts of women in keeping pace with their onerous task as pillars of the family. Common notion has it that women make the home while men make the house. There is truism in the assertion because women have been described in many fora as image-makers and symbols of family unity. Their dogged spirit, determination and firm character have, indeed, been a source of inspiration to many families. The relevance of women in the family also lend credence to the saying that, 'a happy family is but an earlier heaven'. Outside the family, women have not been found wanting, particularly in the fight towards championing the cause of women emancipation. Women leaders like Gloria Arroyo of the Philippines; Angela Merkel of Germany; Christiana Fernandez of Argentina; Ellen Johnson-Sirleaf of Liberia; Ngozi Okonjo-Iweala of Nigeria, among others, are all products of women empowerment.

Sadly is the case that these prominent roles women play are being undermined by numerous conundrums facing them. A major conundrum is that women are known to always engage in small-scale agriculture, and thus in recent time it has been difficult for their agricultural products to gather momentum because they lack the wherewithal to finance the projects, another factor is that women are working secularly to help support the family financially. In many instances, women work round the clock in providing the basic needs of the family. Besides being supportive to the family, women are not only saddled with the arduous task of shepherding the family, but also a strong force reckoned in family integration. According to the United Nations, women in developing and less developed countries lacked the basic education required for them to perform creditably. The UN Department of Economic and Social Affairs estimate that two-thirds of the world's 900 million illiterate are women. According to UNESCO, over 75 percent of women in Africa, the Arab States, East and South Asia are illiterate. However, women despite their contributions to the national economy had gotten less benefits of economic growth due to inequality as statistics show that they constitute over 70 per cent of rural communities, where the general experience has been the lack of social infrastructure and essential goods and services, gender-based stereotypes and discrimination that deny women equitable access to opportunities, resources and services also abound.

Enumerating the ills that bedevils women, Olabisi Aina, in a paper presented at NGO forum on women empowerment, recently, quoted the United Nation's statistics, revealing that, today, armed conflicts, natural disasters and HIV and AIDS epidemic were other factors that exacerbated women's disadvantaged positions, in particular in developing nations. He added that, in Nigeria, rural women represent 76 per cent of the entire population in the rural areas. They also constitute the larger percentage of the poor that are less educated and are majorly involved in small scale agriculture and petty trading, he added. He however acknowledged that the United Nations (UN) had made significant progress in advancing gender equality including through a landmark agreements such as the Beijing Declaration and Platform for Action Against Women, which is not only a basic human right but one that had achieved enormous socio-economic ramifications.

Since the return to multi-party democracy in 1999 in Nigeria, the political space has been the exclusive preserve of the male elite as majority of the population especially women have been excluded from the political process, situation which has greatly hampered their empowerment and economic development in the country as a whole. While there seems to be a general consensus that mass poverty could cast a shadow on democratic consolidation and economic development (Mattes, 2003).

Nonetheless, critics believe that promoting economic empowerment for women has been greatly hampered in a growing society like Nigeria where majority of women lack sustainable sources of income, social protection and voice. Therefore as a result of the above assertions, the researcher has been motivated to ascertain how gender inequality and poverty have affected women empowerment in Imo State and how women can be empowered through education, agriculture, skill acquisition programmes, and politics for economic development in Nigeria.

## **2. METHODOLOGY**

This study adopted the descriptive survey research method. This research design is considered appropriate because according to Nworgu (2006), it aims on collecting data on, and describing it in a systematic manner, the characteristics, features or facts about a given population. The population of this study comprises of twelve thousand seven hundred and twenty-five (12,725) women from Owerri, Okigwe, and Orlu Zones of Imo State respectively. Below is a table distribution of the population:

**Table 1: Table Showing the Population of Study**

S/N	Name of Zones	Number of Women
1	Owerri	3,587
2	Okigwe	2,897
3	Orlu	6,241
	<b>Total</b>	<b>12,725</b>

The researcher in an attempt to give every constituent of the total population equal opportunity of being selected into the sample used the “Taro Yamane” method. The formula of Taro Yamane is represented as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where;

n = Sample size

N = Population under the study

e = Allowable error-margin 5% or 0.05

i = Constant figure

Therefore, the sample size is three hundred and eighty-eight (388) from the calculation. The cluster sampling technique was adopted by which the study area was zoned to make administration and collection of questionnaire easy. Primary and secondary data will be used for this study. The primary data include questionnaire. The questionnaire will be made of two sections of A and B. Section A provides background information/data of the respondents such as age, occupation, zone etc. while Section B will be the researcher’s made questions which consist of 20 structured questions. “Yes or No” rating scale options was used for the questionnaire. Based on the research work, the method of data analysis collected from the questionnaire was recorded on frequency table and analyzed using frequency distribution and percentages. The percentages were used to show the demographic statistics and formula of the responses. Questionnaire was used as its research instrument to solicit for information from the respondents. Out of the 388 copies of the questionnaire distributed, 350 copies were retrieved while the remaining copies were not retrieved as they were wrongly filled; this number was therefore used for the analysis.

### 3. RESULTS

#### **Women’s Opinion on the Effect of Participation in Politics and Decision-Making on their Lives**

It was shown in table 2 that 251 respondents with a percentage score of 71.7% said yes to the above assertion, 71 respondents which represent a percentage score of 20.3% said no, while 28 respondents representing 8% said I don’t know. This is therefore to conclude that women active participation in politics and decision making can positively affect their lives and family.

**Table 2: Frequency distribution of respondents according to women's opinion on the effect of participation in politics and decision-making on their lives**

Option	No. of Respondent	Percentage of Respondent (%)
Yes	251	71.7%
No	71	20.3%
I don't know	28	8%
<b>Total</b>	<b>350</b>	<b>100%</b>

**Source:** Field Survey (2015)

**Are women trained and provided with equipment to establish a trade in Imo state?**

In table 3 above, the analysis shows that 8 respondents who said yes represent 2.3%, 287 respondents who said no had a percentage score of 82%, while 55 respondents with the I don't know response represent 15.7% respectively. This indicates that the women are not trained and provided with equipment to establish a trade in Imo state.

**Table 3: Frequency distribution of respondents according to their agreement on whether women receive training to establish trade**

Option	No. of Respondent	Percentage of Respondent (%)
Yes	8	2.3%
No	287	82%
I don't know	55	15.7%
<b>Total</b>	<b>350</b>	<b>100%</b>

**Source:** Field Survey (2015)

**Does the government empower the women with grants to start a petty trade in Imo state?**

Table 4 above holds that out of the 350 respondents, those who said yes to the above assertion are 54 with a percentage score of 15.4%, 199 respondents said no which represents 56.9%, while the remaining 97 respondents said I don't know which represent 27.7%. Therefore, it can be concluded showing from the analysis that the government does not empower the women with grants to start a petty trade in Imo state.

**Table 4: Does the government empower the women with grants to start a petty trade in Imo state**

Option	No. of Respondent	Percentage of Respondent (%)
Yes	54	15.4%
No	199	56.9%
I don't know	97	27.7%
<b>Total</b>	<b>350</b>	<b>100%</b>

**Source:** Field Survey (2015)

**Are there any financial institutions in Imo state that give out loans to women to trade with?**

It was shown in table 5 that 66 respondents with a percentage score of 18.9% said yes to the above assertion, 121 respondents which represent a percentage score of 34.6% said no, while 163 respondents representing 46.6% said I don't know. This is therefore to conclude that the women are not aware if there any financial institutions in Imo state that give out loans to women to trade with.

**Table 5: Are there any financial institutions in Imo state that give out loans to women to trade with?**

Option	No. of Respondent	Percentage of Respondent (%)
Yes	66	18.9%
No	121	34.6%
I don't know	163	46.6%
<b>Total</b>	<b>350</b>	<b>100%</b>

**Source:** Field Survey (2015)

**Can the involvement of women in self-help development project empower them in their communities?**

Analysis in table 6 above shows that respondents with the yes response are 310 representing a percentage score of 88.6%, those with the no response are 28 with a percentage score of 8%, while 12 respondents representing 3.4% fell within the I don't know response which implies that the involvement of women in self-help development project can empower them in their communities.

**Table 6: Can the involvement of women in self-help development project empower them in their communities?**

Option	No. of Respondent	Percentage of Respondent (%)
Yes	310	88.6%
No	28	8%
I don't know	12	3.4%
<b>Total</b>	<b>350</b>	<b>100%</b>

**Source:** Field Survey (2015)

#### **4. DISCUSSION**

Women are not allowed to actively participate in politics and decision making that can positively affect their lives and family and were not given equal representation to involve in self-help development project in their respective communities. In the study of Ayoola (2011), gender has become a critical cross-cutting factor in innovation process to promote equity and enhance the relative access of female and male farmers to necessary resources in programmes aimed at promoting household food security. In supporting the above findings of this study, Ntiwunka (2013) asserts that despite economic progress, income growth in most developing countries has made insignificant progress toward gender equality in the area of female mortality and access to economic opportunities. Women still have less voice, less power, less control over resources and are very much vulnerable to violence at home. In most African countries, women cannot acquire land without a husband's authorization. They are not involved in household decisions about spending their personal earned income (Katz and Chamorrow, 2003).

#### **5. CONCLUSION**

Women are not allowed to actively participate in politics and decision making that can positively affect their lives and family and were not given equal representation to involve in self-help development project in their respective communities.

#### **6. RECOMMENDATIONS**

The Nigerian government should provide an enabling ground for Nigerian women to rekindle their hope and faith in the ability of the system to provide for its people irrespective of sex, age, ability, religious inclination and other mundane considerations.

The Ministries of Women Affairs all over the Federation need to play a great role in bringing to focus the fundamental challenges of the women folk which the government and other institutions of state owe the responsibility to tackle. To achieve this, constant pressure should be brought to bear on the authorities that be to create positions of responsibility and advancement for the women.

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## GAME THEORY APPROACH TO CONFLICT AND COOPERATION IN INTERNATIONAL RELATIONS

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### **ABSTRACT**

*Security and economics are the two main issues considered in the theory and practice of international relations. Achieving cooperation is difficult in the world politics and economy. There is no common government to enforce rules, and international institutions are weak. Scientists have long attempted to understand the fundamental causes of conflict and cooperation, especially when participants are mutually distrustful. The game theory enabled researchers to analyze this subject. The game theory models strategic confrontations where each player tries to get the maximum payoff, knowing that the other player will also try to do the same.*

*The application of game theory to international relations is not new, but there has been an increase in the particularity of the approaches, associated with new applications of the game theory models to international political economy in addition to their standard role in military-political strategic analysis. The concept of nation-states as independent goal-seeking actors lies in the heart of strategic game analysis.*

*The classical Prisoners' Dilemma game is the most referred to in the field of game theory and international relations and it is often used to show how countries in conflict may lose out due to self interest, rather than cooperate with one another. Theoretical analysis of the iterated, two-player Prisoners' Dilemma shows that a strategy based on reciprocity (such as tit-for-tat) can be effective in promoting cooperation. This suggests that states may have incentives to practice reciprocity in a variety of situations that are characterized by mixtures of conflicting and complementary interest and that a strategy based on reciprocity can yield relatively high payoffs against other strategies. Games such as Chicken and Stag Hunt are also significant for analysis of international relations.*

*However, it seems that the classical game theory, its "games", and its way of "playing" the game, are not sufficiently adapted to the specificities of contemporary international relations. New approaches, based on the "soft" games, such as the theory of moves, meta games theory, hyper games theory, analysis of confrontation, analysis of options, offer new solutions, but they are not yet sufficiently theoretically elaborated and confirmed.*

**Keywords:** *cooperation, conflict, game theory, international relations*

*All the world's stage, and all the man and women merely players.*

*William Shakespeare (As You Like It)*

### **1. INTRODUCTION**

The application of game theory to international relations is hardly new, but there has been a recent increase in the particularity of the approaches (Snidal, 1985). This has been associated with new applications of the game theory models to international political economy in addition to their standard role in military-political strategic analysis. The concept of states as independent goal-seeking actors lies in the heart of strategic game analysis.

The game theory- GT can be treated as the branch of the decision theory - DT, for its analysis of interaction between rational decision makers (players), with the mathematically based models of conflict and cooperation. GT has been often used to explain how cooperation can

evolve under anarchic and conflict conditions in international relations which lack supranational authority to enforce compliance. Most applications of game theory to the study of international relations and cooperation have assumed the states as rational unified "actors" (players), that act in complex interdependence. State actions are influenced by certain norms, but such norm-governed behavior is mainly consistent with the pursuit of national interests.

GT can cope, in principle, with high degree of complexity. Most game theoretic studies of international relations and cooperation have been focused on the so-called Prisoner's Dilemma -PD, which is very attractive since it can produce cooperative behavior under "realistic" conditions (Haggard and Simmons, 1987). If play is repeated, the costs of defecting on any single move must be calculated, not only with reference to the immediate payoff, but with reference to the opportunity costs associated with future interactions.

International regime is defined as: "implicit or explicit principles, norms, rules and decision-making procedures around which actors' expectations converge in a given area of international relations" (Karsner, 1982). More restricted definition treats international regimes as multilateral agreements among states which aim to regulate national actions within issue area. Regimes are said to affect state behavior in two ways (Haggard and Simmons, 1987). First is that regimes have changed the situation in which states interact, so the cooperation is more likely. Second, regimes reduce information and transaction costs associated with bilateral contracting. However, it is questionable to treat international regimes as the "rules of the game" in the "international" game theory.

## 2. GAME THEORY

GT is the study of decision-making where decision makers, i.e. players (agents who make decisions in a game), must make choices that potentially affect the interests of the other players. It is the study of conflict and cooperation, where the game is a model or formal description of a interactive strategic situation (i.e. game), and players may be individuals, groups, firms (companies), organizations, states (nations), or any combination of these (Binmore, 2007, Osborn, 2002). Therefore, a "game" is a complete specification of the strategies each player has, the order in which players choose strategies, the information players have, and how players value possible outcomes (utilities) that result from strategy choices.

A strategy is one of the given possible actions of a player. A game in "strategic form" (also called "normal" form), is a table (matrix, payoff matrix) representation of a game in which players simultaneously choose their strategies, and the resulting payoffs are presented in a table with a cell for each strategy combination. In an "extensive form" game, a strategy is a complete plan of choices, one for each decision point of the player (represented with a decision "tree"). It is a complete description of how the game is played over time. This includes the order in which players take actions, the information that players have at the time they must take those actions, and the time at which any uncertainty in the situation is resolved. A payoff is a number (also called utility) that reflects the desirability of an outcome to a player. A strategy dominates another strategy of a player if it always gives a better payoff to that player, regardless of what the other players are doing.

Different kinds of games are represented by different classes of games, as defined by the number of players and the structure of the payoffs. A cooperative game – CG is specifying what payoffs each potential cooperative group (or coalition) can obtain by the cooperation of its members, and this kind of the game is applied to situations in political science or international relations, where concept of power is most important. A non-cooperative game - NCG models the process of players making choices in their own best interest, where the ordering and timing of players' choices are crucial to determining the outcome of a game. Cooperation can (and often does) arise in non-cooperative games.



There are different branches or variants of the GT (Izquierdo, Izquierdo, Vega-Redondo, 2012). A key assumption in most variants of the GT is that the players are rational. A player is said to be rational if he seeks to play in a manner which maximizes his own payoff (always choose an action which gives the most preferred outcome). It is often assumed that the rationality of all players is common knowledge.

Classical Game Theory - CGT is the branch of GT (chronologically the first branch to be developed by John von Neumann and Oskar Morgenstern in 1944., when GT was formally established as a field in its own), devoted to the formal analysis of how rational players should behave in order to attain the maximum possible payoff. CGT began as mathematics and continues largely in that tradition, but it also has become standard in many social sciences. In CGT players are assumed to be rational, meaning that they act as if they have consistent preferences and unlimited computational capacity to achieve their well-defined objectives. In CGT payoffs reflect preferences, i.e. the payoffs for each player effectively define a preference ordering over the set of possible outcomes. This branch of GT is the one where most of the study and work in GT has been focused and is the one with the largest representation in most GT textbooks and academic studies.

Evolutionary Game Theory-EGT is the branch of GT that studies the evolution of large populations of individuals who repeatedly play a game and are exposed to evolutionary pressures (i.e. selection and replication subject to mutation). Learning Game Theory-LGT is the branch of GT that studies the dynamics of a group of individuals who repeatedly play a game, and who adjust their behavior (strategies) over time, as a result of their experience. Behavioral Game Theory- BGT is about what players actually do- it expands analytical GT (with data based on experiments) by adding emotion, mistakes, limited foresight, doubts and learning to theory. There are also other branches of GT.

### 3. INTERNATIONAL RELATIONS

The field of international relations - IR, narrowly defined, concerns the relations among the world's governments (Goldstein and Pevehouse, 2013, p. 3). We can look at IR in terms of the mix of conflict and cooperation in relations among states, with the world politics and economy dominated by a few states. But, these relationships cannot be understood in isolation, because they are closely connected with other (non state) actors (such as international and intergovernmental organisations - IGOs, nongovernmental organizations - NGOs, multinational corporations - MNCs, and individuals), with other social structures and processes. These elements together shape the central trend in IR today-globalization, although the states remain the most important actors in IR. Security and economics are the two main issues considered in the theory and practice of IR.

No single theory explains IR. The dominant IR theory is "realism", with the states as actors (players), who pursue their national interests in an anarchic world (O'Neill, 1990). Significant cooperation in this world is impossible or (for "neorealists") very difficult. Theoretical alternatives to "realism" - "liberal" and "social" theories - think that the cooperation is possible, either because of growth of international institutions and interdependence, the imposition of order by a dominant power, the common interest of subregions, standards of international behavior (regime theory), or transnational class interests.

“Realism” as a school of thought explains IR in terms of power (defined as the ability to get another actor to do what it would not otherwise have done, or not to do what it would have done). On the other hand, “liberalist” dispute the reality notion that narrow self-interest is more rational than mutually beneficial cooperation.

#### 4. GAME THEORY AND INTERNATIONAL RELATIONS

GT was first used extensively in IR in the late 1940s, 1950s and 1960s to understand U.S.-U.S.S.R. "Cold War", and strongly influenced thinking on military strategy. Moves were decisions to use nuclear (or other) weapons in certain way, and payoffs were outcomes of the war. The use of game theory to study IR has become more extensive in recent years, especially among "realists", who accept the assumptions of rationality which implies that states and other international actors can identify their interests and put priorities on various interests, and that a states seek actions to advance their interests. Rationality also implies that actors are able to perform cost-benefit analysis - calculating the costs incurred by a possible action and the benefits it is likely to bring. In the rational model of decision-making process (such as foreign policy process), decision makers set goals, evaluate their relative importance, calculate the costs and benefits of each possible course of action, then choose the one with the highest benefits and lowest costs (Goldstein and Pevehouse, 2013, pp. 76-7, 127).

A lot of IR games in different forms were studied: battles in the World War I/II and the Korean War, the United States and the Soviet Union arms race, the Cuban Missile Crisis, the Suez crisis, the Middle East wars, the Arab-Israel conflict, the GATT/WTO negotiations, the United States-Japan trade negotiations, the OPEC and other international cartel negotiation, sovereign debt restructuring and bargaining between creditors and debtors, climate policy negotiations... The classical (axiomatic) game theory-CGT, given its assumptions and conditions, as well as demanding mathematical apparatus, is very difficult to be applicable in the analysis of conflict and cooperation in real – world IR, so it must resort to certain modifications and simplifications, as well as to the reduction of strategic situation characteristic to simplify the IR games.

Nobel Prize for Economic Sciences in 2005 was awarded to Thomas Schelling and Robert Aumann for the enhancement of understanding of conflict and cooperation through the game-theory analysis. Their work is especially important for the future development of the non-cooperative game theory. One of the best known and most significant book by Thomas Schelling, remains "The Strategy of Conflict" (Schelling, 1960), which presents the author's vision of the game theory (as a unified framework for social sciences), where he emphasises that almost all problems in the decision making process, involving a number of players, contains a mix of conflict and mutual interest, and that such relationships may be successfully analyzed through non-cooperative game theory method

Schelling devoted special attention to bargaining, which always entails some conflict of interest in that each party usually seeks an agreement that is as favourable as possible, because any agreement is better for both parties than no agreement at all. A two-person bargaining situation involves two individuals who have the opportunity to collaborate for mutual benefit in more than one way (Nash, 1950). No action taken by one of the individuals without the consent of the other can affect the well-being of the other one (e.g. state trading between states).

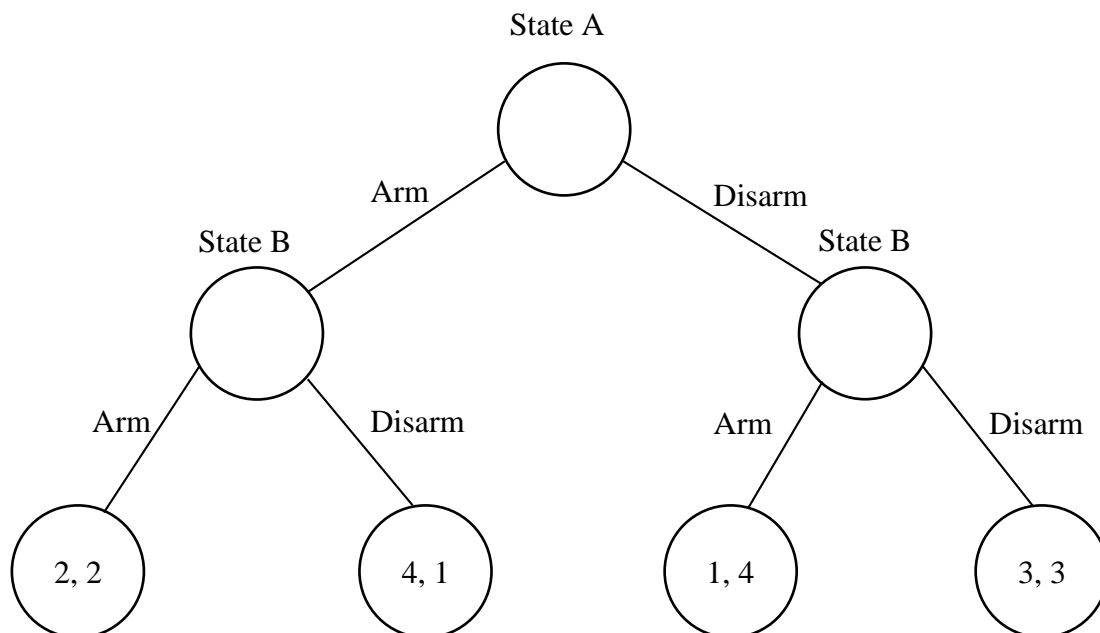
Majority of GT models in IR are identified as either strategic games (normal form), used to represent simultaneous game, or extensive games, more often used to represent a sequential game. A strategic form in a matrix format of the Arms Race is shown in Figure 1. Strategic games have payoffs (utilities) that are determined by which strategy is selected by each player. The normal form is used to represent games where players' moves are simultaneous. This is often the case in games with imperfect information, and allows better identifying dominated strategies and Nash equilibrium (named after John Nash) - i.e. a strategy where none of the players can improve their payoff by unilaterally changing their strategy (every game of mixed strategies will have at least one Nash equilibrium). In Figure 1, Nash equilibrium for the Arms Race is (2, 2), or both player (states) choose "Arm" leading to an arms race, where neither state can improve its own payoff (or utility), by unilaterally changing strategies. J. Nash proved that for each finite uncooperative game (i.e. the absence of coalitions where each player acts independently) there is at least one equilibrium point, assuming that the players are rational.

Figure 1: Arms Race represented as a normal form game

		State B	
		Arm	Disarm
State A	Arm	3, 3	1, 4
	Disarm	4, 1	2, 2

Extensive games' outcomes are represented as a tree structure where initial player (State A) is at the top with branches leading off for each strategy available, as shown in Figure 2. After the first player (State A) chooses an action, the next player (State B) has strategies available creating branches for each of its strategies available. The extensive form is better suited for games where player moves are sequential (i.e. player 1 or State A moves first and then the player 2 or State B moves).

Figure 2: Arms Race represented as a extensive form game



Unfortunately, in political science, game theory has been frequently misunderstood and misapplied at the same time that its concepts (e.g., "player", "payoff", and "zero-sum") have become a part of the working vocabulary of modern political scientists (Brams, 2004, p. xi). Anatol Rapoport, said: "Knowledge of game theory does not make any one better card player,

businessman or military strategist, because game theory is not primarily concerned with disclosing the optimum strategy for any particular conflict situation. It is concerned with the logic of conflict, that is, with the theory of strategy. In this lies both the strength and limitation of the technique. Its strength derives from the powerful mathematical apparatus that it can bring to bear on the strategic analysis of certain conflict situations. The limitations are those inherent in the range of conflicts to which this analysis can be successfully applied (Rapoport, 1962).'' Some assumptions built into the formal model application of GT (mainly CGT) to IR are questionable, such as: (1) GT models in IR assume that the states are ''unified entities'', whereas actually each one contains diverse interests and motivations (political parties, military complex, personal interests of key decision-makers, commercial interests...); (2) GT models in IR mainly assume a limited range of alternatives, while the actual state of affairs is closer to the opposite; and (3) payoffs included in GT models in IR are quite arbitrary (they are not empirically based) and may simply serve to justify the preferred policy (Brian, 1978). Also, it is questionable how much the ''typical'' strategists who model IR actually apply (original) concepts from GT, and how much they apply a some kind of the distorted version of GT. Thus it might be said that many such applications are ''misuses'' of the theory. Even so, the use of game theory as a conceptual inspiration in strategic studies of IR still reflects the selective usefulness of GT concepts for particular types of purposes (Brian, 1978).

## 5. PRISONER'S DILEMMA AND INTERNATIONAL RELATIONS

The Prisoner's Dilemma –PD is a very elegant way of modelling the problem of cooperation between the players who have opposing interests. It is simply an abstract formula of some very common and very interesting situations in which what is best for each person individually leads to mutual defection, whereas everyone would have been better off with mutual cooperation. In a single PD game, the dominant strategy is non-cooperating (defecting), because it carries the highest reward regardless of the opponent's strategy. In games that have multiple iterations and where there is a high probability that players/opponents (State A and State B) will meet again, cooperative strategies (very simple strategy called ''tit-for-tat'' – TFT, which is based on attempt to cooperate and later on reciprocity and ''copying'' the opponent's last move), achieve better results, what was proved by R. Axelrod (Axelrod, 1984, pp. 7-31).

In the Prisoner's Dilemma game, there are two players. Each has two choices, namely to cooperate (C) or to defect (D). Each must make the choice without knowing what the other will do. No matter what the other does, defection yields. The dilemma is that if both defect, both do worse than if both had cooperated. The way the game works is shown in Figure 3. (Axelrod, 1984, pp. 7 - 10). One player chooses a row, either cooperating or defecting. The other player simultaneously chooses a column, either cooperating or defecting. Together, these choices result in one of the four possible outcomes shown in that matrix. If both players cooperate, both do fairly well. Both will get *R*, the ''reward for mutual cooperation''. In this concrete illustration of Figure 3 the reward is 3 points.

If one player cooperates but the other defects, the defecting player gets the ''temptation to defect'', while the cooperating player gets the ''sucker's payoff'' (term coined by Axelrod). In the Figure 3, these are 5 points and 0 points. If both defect, both will get 1 point, the ''punishment for mutual defection''.

Figure 3: The Prisoners' Dilemma (Axelrod, 1984, p. 8)

		Column Player	
		Cooperate	Defect
Row Player	Cooperate	R = 3, R = 3 Reward for mutual cooperation	S = 0, T = 5 Sucker's payoff and temptation to defect
	Defect	T = 5, S = 0 Temptation to defect and sucker's payoff	P = 1, P = 1 Punishment for mutual defection

Note: The payoffs to the row chooser are listed first; terms for payoffs are coined by Axelrod

In PD what is best for each player individually leads to mutual defection, whereas everyone would have been better off with mutual cooperation. Individual rationality leads to a worse outcome for then is possible. Hence the dilemma! The best a player can do is get  $T$ , the temptation to defect when the other player cooperates. The worst a player can get is  $S$ , the sucker's payoff for cooperating while the other player defects. In ordering the other two outcomes,  $R$ , the reward for mutual cooperation, is assumed to be better than  $P$ , the punishment for mutual defection. This leads to preference ranking of four payoffs from the best to worst as,  $T, R, P$  and  $S$  ( $T > R > P > S$ ).

The second part of the definition of the PD is that the player cannot get out of their dilemma by taking turns exploiting each other. It is therefore assumed that the  $R$  is greater than the average of the  $T$  and the  $S$  ( $R > (T+S) / 2$ ). This assumption, together with the rank ordering of four payoffs, defines the PD.

PD game and its extensions can be used for simplified analysis of international political crisis, or international trade and financial negotiations, however, at least in some cases, the game called Chicken is a better representation of the phenomenon (i.e. for Cuban Missile Crisis or GATT/WTO negotiations) (Correa, 2001).

Many of the "standard" 2 x 2 games most frequently the subject of theoretical IR analysis – including the PD, Chicken game and Stag Hunt – share the characteristic that the choice for each player is between a strategy that is beneficial to the other (Cooperate), and one that is harmful (Defect) – "Cooperate - Defect" (CD) games, where each player has a consistent preference as to which strategy the other player adopts, and a choice between actions carry a clear positive or negative externality for other players. But, real-world conflict and cooperation situations are not so simple, they are more complex.

## 6. GAME THEORY IN THE ANARCHIC, COMPLEX AND CHAOTIC WORLD

The assumption of anarchy is central to theories of cooperation among states (Busch and Reinhardt, 1993). The essence of the assumption is that, in absence of central authority to enforce international agreements, states are motivated by temptation to exploit each other and by the fear of being exploited. The result is that states are predisposed to act on preference that risk conflict and war.

On the other hand, international system- IS is quite definitely a very complex system and as Herbert Simon simply and informally defines a 'complex system' is to be a system made up of a large number of parts that interact in a non-simple way (Simon, 1962).

Also, in theory, despite the anarchy, the IS is far from chaotic, and the great majority of state interactions closely adhere to norms of behaviour-shared expectations about behaviour which is considered proper (Goldstein and Pevehouse, 2013, p. 50). Norms change over time, but the most basic norms of the IS changed little in recent centuries. Anarchic IS has to some extent characteristics of the chaotic system, so it is possible the application of chaos theory (as the study of complex, nonlinear, dynamic systems)- CT in the (political and economic) IS, since it has some of its features.

In chaotic system, small disturbance multiply over time because of nonlinear relationships and dynamics, repetitive nature of chaotic system, and as a result, such system is extremely sensitive to initial conditions, which makes long-term forecasting, formation and implementation of the strategy, very difficult.

More or less present characteristics of anarchy, complexity and chaos of the IS hinder the application of GT (at least classical GT) based on clear rules of the game and the (super)rational behavior of players.

## 7. CONCLUSION

The fundamental reasons that it is getting difficult to explain and describe the phenomenon of IR are: (1) the system components that constructs the international system- IS vary; (2) the nonlinear interactions between IS components are increasing. The original classic (axiomatic) GT, given its assumptions and conditions, as well as demanding mathematical apparatus, is very difficult to be implemented to the complex analysis of conflict and cooperation in IR and IS, so it must resort to certain modifications and simplifications, as well as to the reduction of strategic situation to "simplify" the games.

And in this "simplification" some crucial issues may be neglected, and, on the other hand, different "modifications" led to different results. For example, recent study of Frank Zagare, that evaluated different attempts to use game theory to explain strategy dynamics of Cuban missile crisis (1962) - one of the most significant events in IR - including explanations developed in the style of Thomas Schelling (crisis bargaining model: treat – that - leaves something – to - chance), Robert Powell (two - person sequential game model), Nigel Howard (theory of metagames), Nail Fraser and Keith Hipel (analysis of options/improved metagames), Steven Brams (theory of moves), and R. Harrison Wagner (theory of games with incomplete information), found that all these explanations are to be either incomplete or deficient in some way (Zagare also offered his model of asymmetric escalation game as a solution) (Zagare, 2014). All these models are based on reformulation of the classical GT in attempt to explain Cuban missile crisis, usually presented as Chicken game in many textbooks (which is often criticized for its oversimplification the situation).

The use of classical GT as a theoretical framework or conceptual inspiration in strategic studies of IR reflects the selective usefulness of GT concepts for particular types of IR and purposes. However, it seems that the classical game theory, its "games" and its way of "playing" the game, are not sufficiently adapted to the specificities of contemporary international relations. New approaches, based on the "soft" games (i.e. games that can change during the game), such as the theory of moves, meta games theory, hyper games theory, analysis of confrontation, analysis of options, offer new solutions, but they are not yet sufficiently theoretically elaborated and confirmed, except, to certain extent, theory of moves (ToM) of Steven Brams (Brams, 1993).

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## CULTURAL FORMS OF SOCIAL CAPITAL: LIBERAL AND CONSERVATIVE DIFFERENCES IN THE PRESENCE OF SOCIAL CAPITAL

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### ABSTRACT

*Social Capital has been demonstrated to have a positive influence on a host of economic and social development indicators. However, with regional and cultural differences social capital may not work as well in certain areas. Furthermore, different forms of social capital may have either a positive or negative effect on economic and social development. The current analysis examines how different cultural values can determine what type of social capital is present in a community. Using voting patterns in the United States the study demonstrates that liberal counties (the percent of the county that voted for Barack Obama) had different forms of social capital present than conservative counties (the percent of the county that voted for Mitt Romney). Liberal counties had significantly higher forms of sports and nonprofit organizations, while conservative counties had increased religious institutions. The study demonstrates that policy makers should be aware of the form of social capital present in a community to be able to best mobilize and use social capital as a tool for economic and social development based on the cultural values of the community.*

**Keywords:** *Social capital; liberal; conservative; culture; nonprofit; religion*

### 1. INTRODUCTION

In recent analyses social capital has been demonstrated to have a wide array of effects on a community. Areas with increased levels of social capital has been shown to produce healthier citizens (Putnam 2000), help create more effective government (Knack 2002; Rice 2001), associated with increased economic growth (Tiepo and Reimer 2004), and provide better educational outcomes for the community (Putnam 2000). Moreover, areas with higher levels of social capital have been demonstrated to have lower levels of crime (Rosenfeld, Messner, and Baumer 2001), crime victimization (Hawdon and Ryan 2009), reduce fear of crime in a community (Kruger et al. 2007), and produce less firearm violence (Kennedy et al. 1998). Social capital appears to provide a large benefit to residents in communities that have high levels of social capital.

While communities can attempt to produce increased levels of social capital to experience all the benefits discussed above, individuals are choosing what communities to live in. Bishop (2009) described how people are sorting themselves into like-minded communities. Florida (2002) stated that individuals choose where to live based on their desires and their wants in life. Advances in communication and transportation have allowed individuals today to become highly mobile. Thus, individuals are choosing areas to live that fit their view of what a community is and should be.



One of the ways that we can see the sorting of individuals to certain communities is in the level of political polarization in the United States. Each election maps are shown by news agencies coloring states and counties as red or blue. Abramowitz and Saunders (2008) demonstrated that since the 1970s political polarization has increased dramatically in the United States. Moreover, they illustrated that politically polarized voters are not relegated to a small minority of individuals, but instead comprise a large segment of the public. Therefore, like-minded individuals are sorting themselves along political identity lines. Liberal individuals would potentially seek out communities with like-minded liberal residents and local governments. At the same time, conservative individuals would seek out like-minded conservative communities.

Social capital is not a tool that either liberal or conservative communities can use. All communities can attempt to increase social capital to acquire some of the benefits that researchers have discussed. However, because of different ideologies and understandings of the culture and politics communities cannot simply follow a blanket policy of how to increase social capital. Certain communities would be more open to certain options. Some communities would like to open more food kitchens and homeless shelters, while other communities would not want these types of organizations. Other communities would be open to religious institutions playing an active role in community life, while other communities would not want a religious organization taking part in civic affairs.

The goal of the current analysis is to examine how different forms of social capital can be used by different community types. Using voting data (i.e., the percent of the county that voted for President Obama) we examined what forms of social capital are associated with voting patterns. We grouped organizations and institutions into social capital types, such as nonprofit organizations, religious institutions, social organizations, and sports organizations, which have been used in previous analyses on social capital (Deller and Deller 2010; Rupasingha and Goetz 2008). By understanding what social capital type is associated with voting in a liberal or conservative manner communities can focus on how to best increase social capital in their areas.

## 2. LITERATURE REVIEW

### *Polarization in the United States*

Many articles and books have demonstrated that individuals in the United States are sorting themselves to live and work around people of like-mindedness (Bishop 2008; Chinni and Gimpel 2010; Florida 2002; 2008; Woodard 2011). With increased communication and transportation individuals no longer feel “stuck” in a particular area. Individuals can move to new areas and remain in contact with friends and family in another area of the country or world. At the same time, the increased mobility allows individuals to move to areas that have amenities and ideologies that match what they would like to have.

Florida (2008) described this process with the creative class, explaining that individuals are moving to particular cities and areas that offer individuals their preferred lifestyle. Today, workers are particularly mobile and decide what features of a city are attractive and choose where to reside based on their norms and values (Florida 2002). Furthermore, Florida (2002) argues that today’s workers are going to move to areas that are going to put them into the best position to succeed. Therefore, individuals are moving to areas that offer them a lifestyle they prefer and opportunities to succeed both financially and creatively.

Bishop (2008) examined this sorting process of American communities arguing that over the past thirty years individuals in the United States have been moving to neighborhoods that reflect their norms and values. Individuals have been choosing to live in areas that have the religious institutions, the shopping, the politics, and so on that reflect their lifestyle (Bishop 2008). This process of sorting has created homogenous communities where individuals only hear and see the values and norms that reflect their ideas about politics, life, and morals.

Other scholars have pointed out that the United States does have unique regions, neighborhoods, and communities that reflect the norms and values of the residents of the area (Chinni and Gimpel 2010; Woodward 2011). Chinni and Gimpel (2010) described how the United States is made up of 12 distinct areas. These 12 areas reflect the norms and values of the residents. Moreover, Woodward (2011) demonstrated that the historical roots of the United States have produced different values and norms in different areas. Different regions of the United States were colonized by different countries leaving a distinct imprint on the region. Furthermore, different races and ethnicities located in different areas, again leaving a unique set of values and norms in a particular area.

Flora and Flora (2004) demonstrated that this sorting process was not unique to urban areas. The scholars illustrated that there are distinct rural areas in the United States. Because of the distinct culture found in different rural communities there are distinct norms and values (Flora and Flora 2004). This sorting process has allowed individuals in the United States to move and reside in areas that reflect their lifestyle. Therefore, any community based intervention cannot be a one size fits all model. Each community has a unique set of values and norms that are more or less open to different development models. The next section will examine social capital and demonstrate how it has been examined as a one size fits all model to community and economic development.

### *Social Capital*

Social capital is built upon reciprocal trust in the community (Coleman 1988; Putnam 2000). Individuals have relationships within a community from which they can use to achieve certain ends (Rosenfeld, Messner, and Baumer 2001). The reciprocation and trust helps social capital to bond the community members together and to strengthen group norms (Coleman 1988). For Putnam (2000: 19) social capital is the “connections among individuals – social networks and norms of reciprocity and trustworthiness that arise from them... in a sense social capital is closely related to what some have called ‘civic virtue’.”

Bourdieu (1986) illustrated that the amount of social capital was dependent on the size of an individual’s social network and the amount of capital connected to that network. Coleman (1988) demonstrated that social capital encompassed the expectations and obligations that inform social behavior due to the social networks of the individual. However, it was Putnam (2000) that demonstrated that social capital could be a tool that communities could use to increase economic and social development. Putnam (2000) recreated social capital to illustrate how the concept could be applied to communities.

Putnam (1994) examined Italy’s different regions and conclude that social capital was the difference in what regions were prosperous and what regions were deteriorating. Putnam (2000) also demonstrated that declines in social capital were having an adverse effect on community life in the United States. Putnam’s examinations of social capital amplified the interest in social capital and produced a host of research that demonstrated how social capital

could be used to aid in many areas of community life (Brown et al. 2014; Hawdon and Ryan 2009; Helliwell 2007; Kelly et al. 2009; Kennedy et al. 1998; Knack 2002; Kruger et al. 2007; Rosenfeld et al. 2001; Rice 2001; Tiepoh and Reimer 2004).

The research literature on social capital has demonstrated that social capital brings positive community effects (Brown et al. 2014). Agnitsch, Flora, and Ryan (2006) illustrated that individuals are more likely to become involved in community life if there is a higher level of social capital present in the community. Using a random stratified sample of 99 rural Iowa communities the authors examined how rural communities were able to take action. The authors conclude that policy makers should promote social interaction and networks. These networks and the interaction between them will allow community members to solve local problems.

Knack and Keefer (1997) illustrated that social capital increases overall economic activity and increases political participation. Examining 29 countries the authors found that countries with more social capital had increased economic performance. Also, they scholars political participation was higher in countries with increased levels of social capital. Knack and Keefer (1997) argued that business owners and citizens had more trust in the community. Therefore, these two groups were more willing to invest and participate in the affairs of the country.

Leonard, Croson, and de Oliveira (2010) examined social capital and contributing to charities. The study examined two neighborhoods in Dallas, Texas using a survey of 408 residents. The authors found that the more social capital in the neighborhood the more charitable giving. The level of trust and the size of an individual's social network increased the likelihood of giving to a charity (Leonard, Croson, and de Oliveira 2010). The residents knew the "connections among individuals – social networks and norms of reciprocity and trustworthiness that arise from them" (Putnam 2000, p. 19). Residents understood what was expected and what they would receive in return.

### *The Different Effects of Social Capital*

The literature on social capital has demonstrated that communities can use social capital as a tool to benefit the community both economically and socially. However, recent literature has illustrated that social capital is more complicated. Wood (1997) argued that many people believe that social capital will solve every social, political, and economic problem facing society. This understanding of social capital may be foolhardy. Putnam (2007, p. 138) demonstrated some of the problems with social capital by stating that "immigration and ethnic diversity challenge social solidarity and inhibit social capital." If social capital can be hindered because of the ethnic composition of the community then policy makers and researchers need to be aware of the values and norms present in a community.

Alesina, Baqir, and Easterly (1999) demonstrated that the more ethnic diversity decreased the likelihood on spending on public goods (i.e. education, roads, sewers, and trash pickup). The different groups did not have a high level of trust and did not develop norms of reciprocity. Therefore, they were less likely to spend their money to help others that did not share their values and norms. Alesina and La Ferrara (2000) illustrated that with more ethnic diversity had less participation in social activities. Again, different groups were not creating social capital within the community. Trust and reciprocity are not being cultivated with increased ethnic diversity. Therefore, social capital is not having the same effect as in more homogeneous communities.

Other scholars have pointed out the “dark side” of social capital (Baller and Richardson 2009). Baller and Richardson (2009) argued that bad information can be spread through social networks. This bad information can be used by networks to increase the likelihood of many deviant behaviors. Moore and Recker (2015a) examined how this dark side of social capital could be used to exclude “others” from entering their community. Residents can use social capital to mobilize. The residents can then use their local government to pass laws that keep out the other groups.

Other scholars have demonstrated that social capital’s effect on crime may be different. Social capital has been shown to reduce property crime, but not violent crime (De Coster, Heimer, and Wittrock 2006; Deller and Deller 2010). Other studies have illustrated that social capital has an effect on violent crime (Galea, Karpati, and Kennedy 2002; Rosenfeld, Messner, and Baumer 2001). Examining rural crime, Deller and Deller (2012) suggested that the different findings on social capital and crime could be due to the different values and norms located in different communities. Deller and Deller (2012, p. 233) state that what “might make sense for the Great Plains may not make sense for the Mountain West.” Policy makers and researchers need to understand that different communities may interact with social capital differently. There must be a willingness for individuals within a community to engage with each other and interact with the social institutions in the community.

Other scholars have indicated that different types of social capital may have different effects on the community (Deller and Deller 2010; Moore and Recker 2015b). Deller and Deller (2010) created four different social capital types: business, church, cooperative, and nonprofit. The authors used the four social capital types to examine rural crime in the United States. They argued that the four types of social capital all had different effect based on the type of social capital in the analysis and the type of crime in the analysis. Certain forms of social capital may have a larger effect of property or violent crime. Moore and Recker (2015b) examined three different types of social capital and crime in counties in the United States. The scholars created Putnam-Type, Olsen-Type, and Recreation-Type parochial controls. Examining total, violent, and property crime in 3,033 counties in the United States Moore and Recker (2015b) argue that Putnam-Type parochial controls (religious institutions, civic organizations, and nonprofit organizations) decreased crime.

These studies demonstrate social capital is a complex concept. Different forms of social capital may have different effects. Neighborhood composition may affect the usefulness of social capital. Homogenous communities may use social capital to keep other groups from moving into their neighborhood. All of these indicate that different neighborhoods may use social capital differently. Using the percentage of the liberal vote the current analysis attempts to understand some of the findings discussed above.

### 3. METHODS

To measure the norms and values of a county we collected the percentage of the county that voted for President Barack Obama in the 2012 presidential election (*percent of the liberal vote*). Abramowitz and Saunders (2008) illustrated that the United States has become more polarized since the 1970s. Other scholars have demonstrated that individuals in the United States are moving to areas with other like-minded individuals (Bishop 2008; Chinni and Gimpel 2010; Florida 2002; Woodard 2011). With increases in technology, communication, and transportation individuals are no longer bound to a particular place (Florida 2002). Instead, individuals are sorting into areas with similar values and norms.

The voting percent of the county is an approximation of the values and norms found within the area. Conservative and liberal values can be seen as different ends of the values and norms spectrum in the United States. Therefore, the percent of the liberal vote (percent voting for President Barack Obama in 2012) can be used as guide to the norms and values found in the county.

To examine if different forms of social capital would be more prevalent or less prevalent due to the norms and values of the community the authors of the current analysis used the *social capital index* developed by Rupasingha and Goetz (2008). This index was created at the county level of analysis for the Northeast Regional Development Center for Rural Development. The two scholars collected data for the number of religious institutions, civic organizations, business organizations, nonprofit organizations, political organizations, labor organizations, bowling centers, fitness centers, and the number of public golf courses in each county across the United States for 2009.

**Table 1: Descriptive Statistics**

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Standard Deviation</i>
Liberal Vote	3107	3.472	93.955	39.108	.015
Social Capital Index	3107	-3.941	17.553	.000	1.343
Religion Rate	3107	.000	434.780	95.358	51.149
Sports Rate	3107	.000	289.860	18.503	15.844
Profit Rate	3107	.000	225.830	14.702	15.737
Nonprofit Rate	3105	15.160	12365.070	659.443	428.225
Median Age	3107	21.700	61.400	39.898	4.864
Ethnic Heterogeneity	3107	.000	.500	.191	.157
Residential Mobility	3107	7.440	68.180	29.762	6.992
Families Below Poverty	3107	.000	44.900	11.386	5.516
Divorced	3107	1.600	24.720	10.952	2.319
Unemployed	3107	.000	20.030	4.459	1.803
Population Density (log10)	3107	-1.220	4.840	1.651	.745

We created categories that would operate differently, such as P-Group and O-Group created by Rupasingha and Goetz (2008) and the business, church, cooperative, and nonprofit groups created by Deller and Deller (2010) that would reflect different norms and values within a community. For example, communities that are more religious would have a larger number of religious institutions than more secular communities. Therefore, communities with a large number of churches would be more likely to use the church in community events. More secular communities would not use the church as the center of community life, but instead draw upon other institutions and organizations. The current analysis created four different organizations: *religion, sports, profit, and nonprofit*.

To create the religion rate variable we took the number of religious organizations found in the county. Next, we created the sports rate variable by combining the number of bowling centers, fitness centers, and public golf courses. To create the profit rate variable we combined the business organizations, political organizations, and labor organizations. Finally, we created the nonprofit rate variable by combining the civic organizations and nonprofit organizations.

The control variables used in the current analysis were chosen for their inclusion on significance in other analyses. All variables were collected from the United States Census Bureau. The five-year estimates from the American Community Survey were used for the years 2006-2010. The five-year estimates had to be used because the Census Bureau does not collect information for every year for all counties. Counties with small populations do not have data available for every year (see Table 1).

*Median age* was included in the analysis because age is a large predictor of voting in a conservative or liberal manner (Abramowitz and Saunders 2008; Foner 1974). The racial and ethnic makeup of the community has a large impact on voting patterns in the United States (McCarty, Poole, and Rosenthal 2003). Therefore, the analysis used the *ethnic heterogeneity* measure. Ethnic heterogeneity is the proportion of households occupied by white versus nonwhite persons. The ethnic heterogeneity calculates the probability of two randomly selected individuals from the same county having different ethnicities. Following Osgood and Chambers (2000), we calculated the ethnic heterogeneity measure as  $1 - (\sum p_i)^2$ , where  $p_i$  is the proportion of households within a given ethnic group (i.e., white or nonwhite). The proportion of the households within a given ethnic group is then squared and summed across the two groups. The ethnic heterogeneity measure ranges from 0 to 0.5. A score of 0 indicates the county has only white or nonwhite residents; a score of 0.5 indicates the county has an equal number of white and nonwhite residents.

Individuals moving in and out of a community can create a different set of norms and values being into the community. *Residential mobility* was used to measure the movement of people. To measure residential mobility the current analysis used the percent of the population that moved between 2005 and 2010. Poverty also plays a large role in voting patterns in the United States (McCarty, Poole, and Rosenthal 2003). Poverty was measured by the percent of *families below the poverty*. The level of divorce in the area could also indicate different values and norms with in the area, and thus different leanings toward liberal or conservative candidates. Therefore, the current analysis used the *percent of divorce* for each county. Being unemployed affects an individual's views on social issues, therefore we included the *unemployment* rates for each county. Population density could indicate a more or less urban environment, which would affect the norms and values of the community. *Population density* is calculated as the population of the county divided by the land area, in square miles, of the county. The distribution of the population density was skewed, and the natural logarithmic transformation was used to correct for this skewed distribution. The natural logarithmic transformation did correct the skewed distribution of population density.

To control for regional effects we created dummy variables for the region the county was located in. Dummy variables were created for the *West* (n = 412), *South* (n = 1,420), and *Midwest* (n = 1,055) with the Northeast (n = 220) used as the reference category. Finally, to control for the county being urban or rural we created a *rural* (n = 2,022) dummy variable with urban (n = 1,085) counties being the reference category.

#### 4. FINDINGS

There was a wide variation in the percent of the county voting for President Obama. Table 1 illustrates the mean percent voting for President Obama was 39.11%. There was a low of 3.47% of the county that voted for President Obama and a high of 93.95%. This variation lends credence to the idea that different communities may use social capital in different ways. This would mean that researchers have to be aware that social capital is not a blanket concept that can be used to describe all areas. Instead, communities may be more comfortable using a particular type of social capital to aid in economic and social development.

An ordinary least squares regression was conducted with Social Capital Index and the percent of the liberal vote (see Table 2). This initial regression model was included in the analysis to examine if social capital is more prevalent in liberal or conservative areas. This knowledge could aid policy makers in understanding why outcomes based on social capital may work in some areas and not in others. The regression model illustrates that the percent of the liberal vote was significant and positive ( $\beta = .204$   $p < .001$ ). As the social capital index increased by one unit, the liberal vote increased by 2.27. From our analysis more liberal areas have more social capital than more conservative areas.

The variables ethnic heterogeneity and residential mobility were both significant at the  $p < .001$  level. However, the betas were significant in the unexpected direction. Previous research has suggested that the more diversity would decrease social capital (Alesina, Baqir, and Easterly 1999; Alesina and La Ferrara 2000; Putnam 2007; Wells and Weisheit 2004). It is unclear why we found a different finding from previous analyses. Yet, one explanation maybe that people have become more accepting of different populations based on race and ethnic difference today. However, as some authors have argued individuals may be sorting themselves today based on values and ideals (Bishop 2008; Chinni and Gimpel 2010; Florida 2002; Woodard 2011), rather based on race or ethnicity.

Research on residential mobility has continually demonstrated that increased mobility increases the negative social and economic outcomes of the residents (Kapsis 1978; Kornhauser, 1978; Osgood and Chambers 2000; Sampson 1995; Xie and McDowall 2008). This negative outcome for residential mobility may still hold for other social and economic factors, such as crime, but as others have argued people maybe sorting themselves to be around others that have the same values and ideas (Bishop 2008; Chinni and Gimpel 2010; Florida 2002; Woodard 2011). Therefore, residential mobility maybe a signal that individuals with like values and ideas are resorting themselves into similar communities.

Families below poverty was significant and positive ( $\beta = .224$ ,  $p < .001$ ). As the percent of families living below poverty increased by one unit, the liberal vote increased by .608. Areas with higher poverty levels were more likely to vote liberally. The percent divorced was significant and negative ( $\beta = -.046$ ,  $p < .01$ ). As the percent divorced decreased by one unit, the liberal vote increased by .294. This finding indicates that areas with higher rates of divorce are less likely to vote in a liberal manner. As the unemployment rate increased by one unit, the liberal vote increased by 1.608. Areas with higher unemployment voted in a more liberal way. The population density was significant and positive ( $\beta = .440$ ,  $p < .001$ ). More densely populated areas are more likely to vote liberally.

**Table 2: OLS Regression Results and Percent of Liberal Vote (N = 3107)**

	<i>B</i> ( <i>S.E.</i> )	$\beta$
Social Capital Index	2.271 (.214)	.204***
Median Age	.103 (.065)	.033
Ethnic Heterogeneity	34.557 (1.675)	.364***
Residential Mobility	-.162 (.040)	-.076***
Families Below Poverty	.608 (.052)	.224***
Divorced	-.294 (.098)	-.046**
Unemployed	1.608 (.141)	.194***
Population Density (log10)	8.831 (.421)	.440***
West	-3.082 (1.071)	-.070**
South	-16.527 (.878)	-.550***
Midwest	-5.347 (.862)	-.169***
Rural	-.663 (.534)	-.021
R <sup>2</sup>	.480	

\*p < .05; \*\*p < .01; \*\*\*p < .001

The dummy variables West, South, Midwest, and Rural were all significant. The predicted social capital for Western, Midwestern, and Southern counties is less than the predicted social capital for Northeastern counties. The predicted social capital is less for rural counties than the predicted social capital for urban counties.

Next, an OLS regression was conducted using the religious, sports, profit, and nonprofit rates (see Table 3). The religious rate was significant and negative ( $\beta = -.152$ ,  $p < .001$ ). As the religion rate of the county decreased by one unit, the percent of the liberal vote increased by .045. This finding demonstrates that liberal counties in the United States would not use social capital based on religion to create social change. Policy makers and researchers should be aware that in different areas of the country different institutions may hinder social capital development.



**Table 3: OLS Regression Results and Percent of Liberal Vote (N = 3105)**

	<i>B</i> ( <i>S.E.</i> )	$\beta$
Religion Rate	-.045 (.005)	-.152***
Sports Rate	.072 (.015)	.076***
Profit Rate	.026 (.013)	.027
Nonprofit Rate	.006 (.001)	.176***
Median Age	.255 (.062)	.083***
Ethnic Heterogeneity	37.192 (1.645)	.391***
Residential Mobility	-.183 (.040)	-.086***
Families Below Poverty	.541 (.051)	.199***
Divorced	.405 (.097)	-.063***
Unemployed	1.539 (.141)	.185***
Population Density (log10)	7.959 (.415)	.396***
West	-4.299 (1.063)	-.097***
South	-14.679 (.887)	-.489***
Midwest	-3.291 (.857)	-.104***
Rural	-.238 (.533)	-.008
R <sup>2</sup>	.493	

\*p < .05; \*\*p < .01; \*\*\*p < .001

The sports and nonprofit rates were all significant and positive. This indicates that more liberal counties would be open to social capital development based on these institutions. On the same token, more conservative counties would be more open to religious social capital and less open to sports and nonprofit social capital. Again, these findings demonstrate the need for researchers and policy makers to be aware of how different communities have different values and norms before attempting social or economic development based on social capital.

All of the control variables had the same direction of significance as the initial regression. In the second regression the median age was significant and positive ( $\beta = .083$ ,  $p < .001$ ). This finding indicates that as the median age of the county increased by one unit, the percent of the liberal vote increased by .255. This is a surprising finding. Age is usually associated with a more conservative voting pattern in the United States. This finding should garner more examination in future studies, but is beyond the scope of this analysis.

## 5. CONCLUSION

Social capital has been described as a panacea to social, political, and economic development (Wood 1997). However, other scholars have pointed out that social capital is more complex. More recent research has begun to focus on the how social capital affects the community differently depending of the area (Deller and Deller 2012) and that social capital may have a dark side (Baller and Richardson 2009). Moreover, researchers have demonstrated that different forms of social capital may have different effects on economic and social outcomes (Deller and Deller 2010; Moore and Recker 2015b).

The current analysis built on the past literature and demonstrated that different forms of social capital are present in different community types. Liberal counties had increased sports and nonprofit social capital, while conservative counties had increased religious social capital. For a community to use social capital to improve both socially or economically it is important to understand what form of social capital may be present in the community. Attempting to get religious institutions involved in the community may help in more conservative communities, but have no effect in more liberal counties. Attempting to improve the community using nonprofit organizations may help in liberal areas, but conservative areas would not mobilize in the same way. Understanding the local community's values and norms will aid policy makers and researchers to best use social capital as a tool of social and economic development.

With the sorting of citizens in the United States it is important for scholars to understand the meaning. As more individuals move to areas that have their same values and norms neighborhoods may be becoming more homogenous. The sorting may increase ethnic and racial diversity in certain areas, but the sorting may be increasing the sameness of political ideals, values, and norms (Bishop 2008). We should examine and understand what this sorting means. The current analysis demonstrates that individuals in liberal areas may use social capital differently than in conservative areas.

Future studies are needed to examine how social capital may affect communities differently. Regions in the United States have different norms and values. Countries around the world have different values and norms. Social capital may hinder development in one area and aid development in another. Policy makers and researchers should understand how these different values and norms are going to affect social and economic development based on social capital.

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## THE MINT COUNTRIES: A REGRESSION ANALYSIS OF THE SELECTED ECONOMIC FEATURES

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### ABSTRACT

*In 2001, the world began talking about the BRIC countries - Brazil, Russia, India and China - as potential powerhouses of the world economy. These countries have formalized their cooperation, and later, with the joining of South Africa, became the BRICS. They are often perceived as proponents of multipolar world, choosing multipolarity over unipolarity, and supporting political institutions and organizations, at the same time creating alternative financial institutions to the hegemonic ones (the IMF and the World Bank), still dominated by the developed economies of the Western countries. So, what about a different group of countries, called the MINT countries or simply the MINTs that are emerging, growing economies, are heterogeneous as BRICS, but not nearly as large and powerful, and are located on four different continents, with no formal cooperation between themselves such as the BRICS? This article analyses the basic economic trends in the MINT countries by analyzing the linear relationship between GDP as the dependent variable and household consumption, foreign direct investment and government consumption as the independent variables. The general model is as follows:  $\Delta \log GDP_t = \alpha_0 + \alpha_1 \Delta \log FDI_t + \alpha_2 \Delta \log PC_t + \alpha_3 \Delta \log GC_t + \varepsilon_t$ . The analysis was conducted using ordinary least squared (OLS) regression. By conducting this analysis, it is possible to conclude that the MINT countries have significant differences in regards to the statistical relevance of the chosen independent variables. One of the rare common traits of these four economies is that FDI does not seem to have a statistically significant impact on their development. This article concludes that the MINT countries may have a significant role in international relations as regional powers, but they do not have the economic or political traits necessary to challenge the BRICS countries significantly.*

**Keywords:** *the MINT countries, OLS regression model, foreign direct investment (FDI), GDP growth*

### 1. INTRODUCTION

In 2001, the world began talking about the BRIC countries - Brazil, Russia, India and China - as potential powerhouses of the world economy. They are often perceived as proponents of multipolar world, choosing multipolarity over unipolarity, and supporting political institutions and organizations, at the same time creating alternative financial institutions to the hegemonic ones (the IMF and the World Bank), still dominated by the developed economies of the Western countries.

The Goldman Sachs economist Jim O'Neill, who has now identified the so-called MINT countries - Mexico, Indonesia, Nigeria and Turkey - as emerging economic giants, coined the term<sup>1</sup>. So, what about a different group of countries, called the MINT countries or simply the

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<sup>1</sup> See: <http://www.bbc.com/news/magazine-25548060> (Retrieved 16/03/2016).

MINTs that are emerging, growing economies, are heterogeneous as BRICS, but not nearly as large and powerful, and are located on four different continents, with no formal cooperation between themselves such as the BRICS?

Indonesia, Nigeria and Turkey also have double-digit growth of between 11% and 15%. Mexico is the laggard at just over 7% but this is still stronger than that worldwide figure of 4%. Again, these are measured in local currency – apart from Nigeria for which we record transactions in USD – as, in our view, local currency provides a clearer measure of actual investment in country. So clearly, the MINT nations are ones to watch, but our observatories also show strong growth in local spending on technical applications in, for example, Vietnam (16%) and South Africa (14%) - so do not be distracted by a convenient acronym<sup>2</sup>.

Why are these countries then important for the world economy and the world in general anyway then, and up to what level? The first question is, in other words, why should we analyze the MINT countries i.e. the MINT economies? There are a couple of reasons that need to be emphasized here – economic, demographic, and political. The second question, on which the quantitative analysis seeks to provide an answer, is the following: Is the classification of these countries as a group (from a perspective of economic science, as an object of study for the researchers primarily, since their formal cooperation is not significant) justified?

The MINT countries in 2014 comprised about 633 million people (Indonesia 254.5 million, Nigeria 177.5 million, Mexico 125.4 million, and Turkey 75.9 million<sup>3</sup>) with a tendency of steady, rapid growth. Median age population (2015 est.) for these countries shows that these young populations<sup>4</sup> (Indonesia 29.6 years, Mexico 27.6 years, Nigeria only 18.2 years, and Turkey 30.1 years), especially compared to the European countries (and even the P.R. China with 36.8 years, not to mention Russia with 39.1 years). There are various projections, but according to the Population Reference Bureau, in 2050, Nigeria should have 397 million people, and Indonesia 366 million<sup>5</sup>. So, in only these two countries, according to the afore-mentioned projection, more than 330 million people should be added to their populations. This predicted occurrence of such a demographic “shock” in these countries, of so many young people that

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Jim O’Neill also proposed the new term MIST, for Mexico, Indonesia, South Korea, and Turkey.

See: <http://www.geopoliticalmonitor.com/backgrounder-mist-countries-4746/> (Retrieved 17/03/2016).

<sup>2</sup> <http://www.cambashi.com/contentmgr/showdetails.php/id/2513/page/3> (Retrieved 20/03/2016).

<sup>3</sup> <http://data.worldbank.org/indicator/SP.POP.TOTL/countries/1W?display=default> (Retrieved 16/03/2016).

<sup>4</sup> One of the main determinants of classifying the MINT countries as potential economic power blocs is the young population of these countries, which is considered an asset both at the present and in the future. Youth are expected at the forefront of global social, economic and political developments. In addition to their intellectual contribution and their ability to mobilize support, young people bring unique perspectives that propel any society to greater heights. The progress of any society is based therefore, among other elements, on each society's capacity to involve young women and men in building and designing the future. However, the youth of the MINT countries face many challenges, which the governments, the private sector and civil society organizations should deal with if the youth would become an asset and engine of economic growth (Durotoye, 2014: 104).

<sup>5</sup> <http://money.cnn.com/2015/08/18/news/countries-with-biggest-populations/> (Retrieved 16/03/2016).

will seek jobs<sup>6</sup> and a better future, poses a serious threat to the living standard in these countries, which is even now well below the world average. Therefore, despite the fact the aggregate economies will grow, in the next couple of decades we can expect threats to the social cohesion, cramped living space, destruction of the natural habitats and resource extraction that could (and probably will) result in the continuance of the “resource curse” (especially in Nigeria)<sup>7</sup>.

According to the Goldman Sachs, in 2012, Mexico was the 14<sup>th</sup> world economy, Indonesia 16<sup>th</sup>, Turkey 17<sup>th</sup>, and Nigeria 39<sup>th</sup>. If we accept the World Bank data for 2014 on GDP in market prices (current US\$)<sup>8</sup>, the position of Nigeria was much better, putting it on the 21<sup>st</sup> place in the world. Turkey was 17<sup>th</sup>, Indonesia 16<sup>th</sup>, and Mexico 15<sup>th</sup> world economy, according to the same database. The projections for 2050 predict that Mexico will be the eighth economy of the world, Indonesia 9<sup>th</sup>, Nigeria 13<sup>th</sup>, and Turkey 14<sup>th</sup>. Therefore, it is obvious that the relative position (as well as absolute size of course) of the MINT economies should improve. Hence, it is measured in absolute indicators (GDP); the demographic growth will also play an invaluable role in this continuous growth. Nevertheless, it would be very interesting to see what will be the GDP per capita, GINI index, and HDI in these countries (especially Nigeria and Indonesia) and how will it position them in 2050<sup>9</sup>.

Nevertheless, the prices of commodities in general, and especially fuels (oil and gas) have decreased sharply since 2014, and there are no credible signs that it will grow significantly anytime soon. Nigeria, as a “monoeconomy” completely dependent on oil as its practically only export product is suffering the most. Mexico is a significant oil exporter as well, albeit it is far from being dependent on oil exports like Nigeria. It is the sixth largest oil-exporting nation in the world and along with Canada is the most important foreign source of oil to the United States. Indonesia was the only Asian member of the Organization of Petroleum Exporting Countries (OPEC) outside of the Middle East until 2008 and is currently a net oil importer (Durotoye, 2014: 101). Turkey, on the other hand, profits from the cheap oil and gas, since it is a large net importer. Concurrently, on the negative side, its tourism suffers because of terrorism and the War in Syria. The mid-term projections about the growth of the MINT economies must take all

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<sup>6</sup> Unemployment among Indonesia’s youth aged 15 to 24 is at an unusually high level of 21.6%. Turkey’s youth unemployment rate stands at 17%. Nigeria’s youth unemployment rate is well over 50% as will be shown later in this paper. Interestingly, Mexico’s figure of youth unemployment rate stands at less than 10%.

See: Durotoye, 2014b: 124.

<sup>7</sup> Watts, M. (2004). Resource curse? Governmentality, oil and power in the Niger delta. *Geopolitics*, 9 (1) 50-80.

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<sup>8</sup> <http://data.worldbank.org/indicator/NY.GDP.MKTP.CD/countries/1W?display=default> (Retrieved 16/03/2016).

<sup>9</sup> As of 2012, in terms of wealth the situation is the following: In terms of wealth, Mexico and Turkey are at about the same level, earning annually about \$10,000 (£6,100) per head. This compares with \$3,500 (£2,100) per head in Indonesia and \$1,500 (£900) per head in Nigeria, which is on a par with India. They are a bit behind Russia - \$14,000 (£8,500) per head - and Brazil on \$11,300 (£6,800), but still a bit ahead of China - \$6,000 (£3,600).

<http://www.bbc.com/news/magazine-25548060> (Retrieved 16/03/2016).



these trends and realities into consideration<sup>10</sup>. Therefore, long-term projections should probably be more optimistic than the short- and mid-term ones.

*Table 1. The BRICS and the MINTs: main similarities and differences*

<b>The BRICS</b>	<b>The MINTs</b>
There were four BRIC countries, and later with the joining of South Africa, they became the five BRICS countries.	There are four MINT countries.
The BRICS countries are located on four continents (Asia, Europe, Africa, and South America).	The MINT countries are located on four continents (Europe, Asia, North America, and Africa).
Three BRICS countries are net natural resource exporters (Brasil, Russia, and South Africa) and two are net large natural resource importers (India, and the P.R. China). At the same time, India and the P.R. China are among the largest exporters of industrial products.	Three MINT countries are net natural resource exporters (Indonesia, Mexico, and especially Nigeria). Turkey is net natural resource importer, at the same time being very important and booming exporter of industrial products.
Demographically, the BRICS countries are comprised of three very young and dynamic populations (South Africa, India, and Brasil), one mature population (the P.R. China), and one aging, stagnating population (Russia).	The MINT countries have very dynamic populations, whose median age puts them in the group of young populations. A very high population growth is expected even in the next couple of decades.
As of 2014, according to the World Bank data on GDP in market prices, the BRICS comprised the world's second (the P.R. China), seventh (Brasil), ninth (India), tenth (Russia), and 30 <sup>th</sup> (South Africa) economy.	As of 2014, according to the World Bank data on GDP in market prices, the MINTs comprised the world's 15 <sup>th</sup> (Mexico), 16 <sup>th</sup> (Indonesia), 17 <sup>th</sup> (Turkey), and 21 <sup>st</sup> (Nigeria) economy.

There are not many academic studies that are specifically devoted to the MINT countries (and the MINT economies as well), especially compared to the number of the studies devoted to the BRICS. This is quite normal, if we consider the time (much sooner than the MINTs) when the BRIC(S) emerged as a “bloc”, the overall importance of their economies, their military power and political influence. We emphasize the study of Akpan, Salisu, and Asongu (2014) that studies the determinants of FDI in Fast-Growing Economies, comparing the BRICS and the MINTs. In addition, we have to point out two short, mainly descriptive studies by Durotoye (2014a, b), that study the prospects and challenges of the MINTs as an “emerging economic power bloc”, and the crisis of youth unemployment in the MINT countries. Öztürk and Yildirim (2015) have performed a research studying environmental Kuznets curve<sup>11</sup> in the MINT Countries, by testing evidence of long-run panel causality test, and obtained ambiguous results. They also stated that “According to (Jim) O’Neill, MINT countries have a number of advantages that could potentially propel them to the world’s ten largest economies in three decades (177). A study done by Simplice (2015) is focused on the drivers of growth in fast emerging economies, providing us with the comparison between the BRICS and the MINT countries. Simplice uses a dynamic instrumental quantile approach, in which the instrumental

<sup>10</sup> <http://www.theneweconomy.com/business/is-mint-the-next-bric> (Retrieved 17/03/2016).

<sup>11</sup> The environmental Kuznets curve hypothesis (EKC) urges that there is an inverse-U-shaped relationship between carbon dioxide emission per capita and income per capita. So the EKC argument seeks an answer for the question of “does economic growth need to be slowed in order to avoid increasing harm to the environment” (Carson 2010, 3).  
In: Öztürk and Yildirim (2015: 176).

variable (IV) quantile regression approach is complemented with two-stage-least squares and IV least absolute deviations<sup>12</sup>.

Nevertheless, contrary to the statement that “the MINTs are the new BRICS”<sup>13</sup>, we do not share this opinion, and some of the reasons are found in the sheer numbers pointed out in the introduction, as well as in the quantitative research that makes the backbone of this paper.

## 2. METHODOLOGY

The data were extracted from the World Bank database, the values of GDP in current dollars, and the value of household consumption, general government consumption and the net inflow of FDI in current dollars for the past 25 years. The data was then corrected for inflation using the GDP deflator, also acquired from the World Bank database.<sup>14</sup> Based upon this data, the log difference<sup>15</sup> of the four variables was calculated in order to obtain statistically significant results in terms of variable stationarity. In this model, the log difference of real GDP ( $\Delta \log \text{GDP}$ ) is the dependent value, while the explanatory variables are the log difference of FDI net inflow ( $\Delta \log \text{FDI}$ ), the log difference of household consumption ( $\Delta \log \text{PC}$ ) and the log difference of government consumption ( $\Delta \log \text{GC}$ ). From that point, the models for Tukey, Nigeria and Mexico are considered.<sup>16</sup>

The general model is as follows:

$$\Delta \log \text{GDP}_t = \alpha_0 + \alpha_1 \Delta \log \text{FDI}_t + \alpha_2 \Delta \log \text{PC}_t + \alpha_3 \Delta \log \text{GC}_t + \varepsilon_t \quad (1)$$

The model for Indonesia is slightly different because the FDI net inflow value for several years was negative. In order to preserve the methodology used for the other countries, a constant was added before calculating the log difference in order to make the value of the FDI net inflow

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<sup>12</sup> The following conclusion are reached in the paper: first, while Gross FDI has a negative effect on economic growth, the impact of Net FDI is positive, with a higher magnitude in top quantiles of the distributions. Second, the positive effect of natural resources is more apparent in countries with low initial growth levels. Third, the impact of telecommunications infrastructure is not very significant. Fourth, whereas the incidence of bank credit is positive for GDP growth, it is negative for real GDP output. Fifth, while trade openness is positive in bottom quantiles of GDP growth, but for the highest quantile in real GDP output, it is consistently negative on real GDP output. Sixth, while the incidence of political stability is negative on GDP growth, it is positive on real GDP output, with the negative (positive) effect apparent only in top (bottom) quantiles of GDP growth (real GDP output).

<sup>13</sup> <http://www.tmf-group.com/en/media-centre/news-and-insights/january-2014/refreshing-economic-news-mint-is-the-new-brics> (Retrieved 20/03/2016).

<sup>14</sup> Using the formula variable  $_t * \text{GDP deflator}_{\text{base year}} / \text{GDP deflator}_t$  where the base year was the value of the GDP deflator for 2014 and  $t$  are the value of the years from 1991-2014.

<sup>15</sup> A commonly used technique, calculating the first difference of logarithms is becoming as commonplace for achieving stationarity in times series models as percentage points. In this paper, the natural logarithm (base  $e$ ) was calculated for all values.

<sup>16</sup> In the paper, it was attempted at first to construct an average model for the MINT countries by averaging the values of GDP, net inflow and government and household consumption. The issue with the constructed model was that two of the variables presented issues regarding variable stationarity. Therefore, it was concluded that individual testing for each of the MINT countries would be more representative and provide more statistically significant results rather than change the methodology of the paper.

positive. That same value was added to all of the other variables for that country in the model to preserve the possible linear relationship between the variables.

The model for Indonesia is as follows:

$$\Delta \log (\text{GDP}_t + \beta) = \alpha_0 + \alpha_1 \Delta \log (\text{FDI}_t + \beta) + \alpha_2 \Delta \log (\text{PC}_t + \beta) + \alpha_3 \Delta \log (\text{GC}_t + \beta) + \varepsilon_t \quad (2)$$

In these models, aside from the variables that were previously explained,  $\alpha_0$  is the constants,  $\alpha_{1,3}$  are the trends and  $\varepsilon_t$  is the error term and  $t$  represents the time period that was observed in the paper. The  $\beta$  coefficient<sup>17</sup> is the value that was necessary to make the net FDI inflow have a positive value for Indonesia. In order to test the stationarity of the independent and explanatory variables, the Augmented Dickey-Fuller (ADF) test was used. After performing the tests on the variables to confirm their stationarity, the Ordinary least squares (OLS) method was used to obtain the values of  $\alpha$  coefficients. The models were then tested for the presence of autocorrelation and heteroscedasticity. This was determined by testing the models for autocorrelation by interpreting the Durbin Watson statistic and using the Breusch–Godfrey serial correlation Lagrange multiplier, while the presence of heteroscedasticity was tested by White’s General test for heteroscedasticity. All of these tests were conducted using the Gnu Regression, Econometrics and Time-series Library (GRETLE) software. Upon confirming that the models do not exhibit signs of autocorrelation and heteroscedasticity and confirming the statistical significance of the  $\alpha$  coefficients at  $0=0.05$ <sup>18</sup>.

The period observed by this paper is relatively limited, but is in line with the aims of this paper. Another issue is perhaps that the overall multiplicative effect of FDI on the economy might be underestimated, yet the net inflation corrected values were considered for all four variables observed in the model. Adding a constant in the values for Indonesia is perhaps the simplest solution that still preserves the linear relationship between the variables, but by adding a constant, it complicates any contribution this model might have in hypothesis testing or making statistically significant predictions.

### 3. RESULTS AND DISCUSSION

The ADF test was conducted and all variables are stationary at  $p=0.1$ . The null hypothesis of the ADF test is non-stationarity and as such, if the test statistic value is significant it is possible to reject the null hypothesis of non-stationarity and accept the alternative hypothesis of stationarity. In the values for all of the variables that were observed in this model, the asymptotic  $p$  value of the test statistic is smaller than 0.1. This leads to the conclusion that at  $p=0.1$ , it is possible to reject the null hypothesis of non-stationarity and confirm the alternative hypothesis of stationarity. A summarized table is provided, while the full output provided by GRETLE may be found in the Appendix.

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<sup>17</sup> The value of the  $\beta$  coefficient is 16608121666, and the exact absolute value that was needed to make all of the FDI net inflow values positive was 16608121665.908.

<sup>18</sup> Seeing, as the purpose of this article is to compare the value of the coefficients in the model rather than to predict any statistically significant results, there is no need to test for normality of residuals. The test was conducted despite the previously stated fact in order to test further potential of the models.

*Table 2. Summary table of the ADF test*

<i>Variable</i>	<i>Number of lags<sup>19</sup></i>	<i>Test statistic value</i>	<i>Asymptotic p value</i>	<i>Conclusion</i>
$\Delta \log \text{GDP Turkey}$	2	-3.55496	0.05792	Stationary at p=0.1
$\Delta \log \text{FDI Turkey}$	2	-4.06519	0.02148	Stationary at p=0.05
$\Delta \log \text{PC Turkey}$	2	-3.58145	0.05511	Stationary at p=0.1
$\Delta \log \text{GC Turkey}$	2	-3.57845	0.05542	Stationary at p=0.1
$\Delta \log \text{GDP Mexico}$	2	-4.32216	0.002845	Stationary at p=0.01
$\Delta \log \text{FDI Mexico}$	2	-7.84663	6.206 e-012	Stationary at p=0.01
$\Delta \log \text{PC Mexico}$	2	-4.22862	0.003983	Stationary at p=0.01
$\Delta \log \text{GC Mexico}$	2	-6.52514	5.248 e-008	Stationary at p=0.01
$\Delta \log \text{GDP Nigeria}$	2	-4.91629	0.000262	Stationary at p=0.01
$\Delta \log \text{FDI Nigeria}$	2	-5.56339	0.0009571	Stationary at p=0.01
$\Delta \log \text{PC Nigeria}$	2	-4.22845	0.01544	Stationary at p=0.05
$\Delta \log \text{GC Nigeria}$	2	-6.23776	0.0002351	Stationary at p=0.01
$\Delta \log \text{GDP Indonesia}$	2	-4.70369	0.005532	Stationary at p=0.01
$\Delta \log \text{FDI Indonesia}$	2	-7.25802	2.962 e-005	Stationary at p=0.01
$\Delta \log \text{PC Indonesia}$	2	-5.14814	0.002293	Stationary at p=0.01
$\Delta \log \text{GC Indonesia}$	2	-4.58779	0.007381	Stationary at p=0.01

Source: Authors' calculation and GRETTL output

The stationarity of all of the variables was confirmed and the OLS models for all of the MINT countries can therefore be considered. As can be seen in Model 1, the only  $\alpha$  coefficient that is statistically significant is  $\alpha_2$  which indicates a decisive value of private consumption for the GDP growth of Turkey. White's test for heteroscedastic confirms the null hypothesis at p=0.05 meaning that heteroscedasticity is not present; the LM test confirms that there is no presence of autocorrelation and the errors are normally distributed.

*Model following on the next page*

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<sup>19</sup> The number of lags was automatically chosen by GRETTL. The low value of the first order autocorrelation coefficient that can be viewed in the Appendix, clearly displays that the correct number of lags was used.

Model 1: OLS, using observations 1992-2014 (T = 23) Turkey  
Dependent variable: ld\_GDP

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>	
const	-0.00452279	0.00588235	-0.7689	0.4514	
ld_FDI	0.00803372	0.00861503	0.9325	0.3628	
ld_GC	0.0554345	0.063884	0.8677	0.3964	
ld_PC	0.924105	0.0666338	13.8684	<0.0001	***20
Mean dependent var	-0.233896	S.D. dependent var		0.318080	
Sum squared resid	0.009672	S.E. of regression		0.022562	
R-squared	0.995655	Adjusted R-squared		0.994969	
F(3. 19)	1451.198	P-value(F)		1.31 e-22	
Log-likelihood	56.76578	Akaike criterion		-105.5316	
Schwarz criterion	-100.9896	Hannan-Quinn		-104.3893	
rho	-0.136241	Durbin-Watson		2.165066	
White's test for heteroscedasticity -					
Null hypothesis: heteroscedasticity not present					
Test statistic: LM = 15.8384					
with p-value = P(Chi-square(9) > 15.8384) = 0.0703337					
LM test for autocorrelation up to order 1 -					
Null hypothesis: no autocorrelation					
Test statistic: LMF = 0.353533					
with p-value = P(F(1. 18) > 0.353533) = 0.55952					
Test for normality of residual -					
Null hypothesis: error is normally distributed					
Test statistic: Chi-square(2) = 1.5421					
with p-value = 0.462527					

Source: Authors' calculation and GRETL output

In Model 2, the value of the coefficients for Mexico was considered. A similar trait is that Mexico and Turkey are highly dependent upon private consumption. For Turkey the only coefficient that was statistically significant at  $p=0.1$  was private consumption, implying its very high relevance for the Turkish economy. While private consumption has a very significant effect on the Mexican economy, at  $p=0.05$  the  $\alpha_3$  coefficient is also statistically significant. Therefore, while the Turkish economy is mostly dependent upon private consumptions<sup>21</sup>, the Mexican economy is also dependent – albeit to a lesser degree, both on the private and government consumption. The R-squared value for these models displays that the explanatory variables were properly selected and the explanatory value of the selected model is very high.<sup>22</sup> White's test for heteroscedasticity confirms the null hypothesis at  $p=0.3869$ , meaning that heteroscedasticity is not present. The LM test, as well as the value of the Durbin-Watson statistic, clearly display that the model does not have autocorrelation issues.

<sup>20</sup> Indicates level of significance at the respected 0.1, 0.5 and 0.01 levels.

<sup>21</sup> Out of the three chosen explanatory variables.

<sup>22</sup> The R-squared value is the ability of the model to predict how changes in the independent variables – in the case of these models FDI, private and government consumption, affect GDP change. Therefore for these two models 0.9957 and 0.9949 of the changes can be explained by these models.

Model 2: OLS, using observations 1992-2014 (T = 23) Mexico  
Dependent variable: ld\_GDP

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>	
const	-0.00223632	0.00270695	-0.8261	0.4190	
ld_FDI	-0.00691364	0.00778145	-0.8885	0.3854	
ld_GC	0.0804238	0.0381248	2.1095	0.0484	**
ld_PC	0.848133	0.0382026	22.2009	<0.0001	***
Mean dependent var	-0.038236	S.D. dependent var		0.163043	
Sum squared resid	0.002986	S.E. of regression		0.012535	
R-squared	0.994895	Adjusted R-squared		0.994089	
F(3. 19)	1234.273	P-value(F)		6.07 e-22	
Log-likelihood	70.28320	Akaike criterion		-132.5664	
Schwarz criterion	-128.0244	Hannan-Quinn		-131.4241	
rho	-0.005032	Durbin-Watson		1.840216	
White's test for heteroscedasticity –					
Null hypothesis: heteroscedasticity not present					
Test statistic: LM = 9.56371					
with p-value = P(Chi-square(9) > 9.56371) = 0.386945					
LM test for autocorrelation up to order 1 –					
Null hypothesis: no autocorrelation					
Test statistic: LMF = 0.000537784					
with p-value = P(F(1. 18) > 0.000537784) = 0.981754					
Test for normality of residual –					
Null hypothesis: error is normally distributed					
Test statistic: Chi-square(2) = 1.31648					
with p-value = 0.517762					

Source: Authors' calculation and GRETL output

In Model 3, the economy of Nigeria was considered. The first thing that should be noted is that the explanatory value of the model is not as high as in the cases of Mexico and Turkey. With the R-squared value of 0.700293, the model can predict only about 70% of the changes that occur on the regression line based upon the changes of the independent variable. Taking into account the economy of Nigeria and its high dependence on oil export, perhaps adding a variable that measures net export might enhance the explanatory value of the model. Viewing the model in the context of the other MINT countries, Nigeria does not seem to have a statistically significant effect of FDI on GDP growth, while the most significant variable in predicting GDP change is private consumption, with a far more significant influence of government consumption on GDP change than in Mexico and Turkey.

*Model following on the next page*

Model 3: OLS, using observations 1992-2014 (T = 23) Nigeria  
Dependent variable: ld\_GDP

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>	
const	-0.0254586	0.0292826	-0.8694	0.3955	
ld_FDI	-0.0686506	0.0717877	-0.9563	0.3509	
ld_GC	0.183209	0.085131	2.1521	0.0445	**
ld_PC	0.617862	0.125847	4.9096	<0.0001	***
Mean dependent var	-0.057564	S.D. dependent var		0.226800	
Sum squared resid	0.339159	S.E. of regression		0.133606	
R-squared	0.700293	Adjusted R-squared		0.652971	
F(3. 19)	14.79841	P-value(F)		0.000033	
Log-likelihood	15.85737	Akaike criterion		-23.71475	
Schwarz criterion	-19.17277	Hannan-Quinn		-22.57245	
rho	-0.041131	Durbin-Watson		2.004275	
White's test for heteroscedasticity -					
Null hypothesis: heteroscedasticity not present					
Test statistic: LM = 10.9583					
with p-value = P(Chi-square(9) > 10.9583) = 0.278576					
LM test for autocorrelation up to order 1 -					
Null hypothesis: no autocorrelation					
Test statistic: LMF = 0.0377467					
with p-value = P(F(1. 18) > 0.0377467) = 0.848129					
Test for normality of residual -					
Null hypothesis: error is normally distributed					
Test statistic: Chi-square(2) = 2.35119					
with p-value = 0.308635					

Source: Source: Authors' calculation and GRETl output

The final model considers the economic growth of Indonesia. The explanatory value of the model is as high as was the case with Turkey and Mexico, which indicates that despite comparatively low value of R-squared for the Nigerian model, the explanatory variables were adequately selected. FDI does not have a statistically significant positive impact on GDP growth in any of the considered models. The regression results for Indonesia suggest that government consumption and private consumption have approximately the same impact on GDP growth, which differs significantly in comparison to the other MINT countries. No issues regarding heteroscedasticity or autocorrelation were detected based upon the LM test, White's test and the Durbin-Watson statistic value.

*Model following on the next page*

Model 4: OLS, using observations 1992-2014 (T = 23) Indonesia  
Dependent variable: ld\_GDP

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>	
const	-0.00197728	0.00684776	-0.2887	0.7759	
ld_FDI	-0.00293508	0.000942654	-3.1136	0.0057	***
ld_GE	0.549943	0.0889609	6.1819	<0.0001	***
ld_PE	0.512784	0.0829793	6.1797	<0.0001	***
Mean dependent var	-0.032087	S.D. dependent var		0.303251	
Sum squared resid	0.020043	S.E. of regression		0.032479	
R-squared	0.990093	Adjusted R-squared		0.988529	
F(3. 19)	632.9616	P-value(F)		3.29e-19	
Log-likelihood	48.38631	Akaike criterion		-88.77262	
Schwarz criterion	-84.23064	Hannan-Quinn		-87.63033	
rho	-0.127502	Durbin-Watson		2.235174	
White's test for heteroscedasticity -					
Null hypothesis: heteroscedasticity not present					
Test statistic: LM = 16.0979					
with p-value = P(Chi-square(9) > 16.0979) = 0.0648659					
LM test for autocorrelation up to order 1 -					
Null hypothesis: no autocorrelation					
Test statistic: LMF = 0.572017					
with p-value = P(F(1. 18) > 0.572017) = 0.459244					
Test for normality of residual -					
Null hypothesis: error is normally distributed					
Test statistic: Chi-square(2) = 2.16058					
with p-value = 0.339497					

Source: Source: Authors' calculation and GRETl output

Appendix following on the next page



## Appendix

The first set of ADF test for the variables for Turkey.

<p>Augmented Dickey-Fuller test for <math>ld\_GDP</math> including one lag of <math>(1-L)ld\_GDP</math> (max was 2. criterion AIC) sample size 21 unit-root null hypothesis: <math>a = 1</math> with constant and trend model: <math>(1-L)y = b_0 + b_1*t + (a-1)*y(-1) + e</math> estimated value of <math>(a - 1)</math>: -0.821038 test statistic: <math>\tau_{ct}(1) = -3.55496</math> p-value 0.05792 1st-order autocorrelation coeff. for e: -0.052</p>	<p>Augmented Dickey-Fuller test for <math>ld\_FDI</math> including 0 lags of <math>(1-L)ld\_FDI</math> (max was 2. criterion AIC) sample size 22 unit-root null hypothesis: <math>a = 1</math> with constant and trend model: <math>(1-L)y = b_0 + b_1*t + (a-1)*y(-1) + e</math> estimated value of <math>(a - 1)</math>: -0.934727 test statistic: <math>\tau_{ct}(1) = -4.06519</math> p-value 0.02148 1st-order autocorrelation coeff. for e: 0.005</p>
<p>Augmented Dickey-Fuller test for <math>ld\_GC</math> including 2 lags of <math>(1-L)ld\_GC</math> (max was 2. criterion AIC) sample size 20 unit-root null hypothesis: <math>a = 1</math> with constant and trend model: <math>(1-L)y = b_0 + b_1*t + (a-1)*y(-1) + e</math> estimated value of <math>(a - 1)</math>: -0.820811 test statistic: <math>\tau_{ct}(1) = -3.57845</math> p-value 0.05542 1st-order autocorrelation coeff. for e: -0.038</p>	<p>Augmented Dickey-Fuller test for <math>ld\_PC</math> including one lag of <math>(1-L)ld\_PC</math> (max was 2. criterion AIC) sample size 21 unit-root null hypothesis: <math>a = 1</math> with constant and trend model: <math>(1-L)y = b_0 + b_1*t + (a-1)*y(-1) + e</math> estimated value of <math>(a - 1)</math>: -0.836146 test statistic: <math>\tau_{ct}(1) = -3.58145</math> p-value 0.05511 1st-order autocorrelation coeff. for e: -0.037</p>

Source: Authors' calculation and GRETL output

The second set of ADF tests for the variables for Mexico.

<p>Augmented Dickey-Fuller test for <math>ld\_GDP</math> including 0 lags of <math>(1-L)ld\_GDP</math> (max was 2. criterion AIC) sample size 22 unit-root null hypothesis: <math>a = 1</math> with constant and trend model: <math>(1-L)y = b_0 + b_1*t + (a-1)*y(-1) + \dots + e</math> estimated value of <math>(a - 1)</math>: -1.3662 test statistic: <math>\tau_{ct}(1) = -4.32216</math> asymptotic p-value 0.002845 1st-order autocorrelation coeff. for e: -0.128</p>	<p>Augmented Dickey-Fuller test for <math>ld\_FDI</math> including one lag of <math>(1-L)ld\_FDI</math> (max was 2. criterion AIC) sample size 21 unit-root null hypothesis: <math>a = 1</math> with constant and trend model: <math>(1-L)y = b_0 + b_1*t + (a-1)*y(-1) + \dots + e</math> estimated value of <math>(a - 1)</math>: -2.49415 test statistic: <math>\tau_{ct}(1) = -7.84663</math> asymptotic p-value 6.206e-012 1st-order autocorrelation coeff. for e: 0.153</p>
<p>Augmented Dickey-Fuller test for <math>ld\_GC</math> including one lag of <math>(1-L)ld\_GC</math> (max was 2. criterion AIC) sample size 21 unit-root null hypothesis: <math>a = 1</math> with constant and trend model: <math>(1-L)y = b_0 + b_1*t + (a-1)*y(-1) + \dots + e</math> estimated value of <math>(a - 1)</math>: -1.322 test statistic: <math>\tau_{ct}(1) = -6.52514</math> asymptotic p-value 5.248e-008 1st-order autocorrelation coeff. for e: -0.276</p>	<p>Augmented Dickey-Fuller test for <math>ld\_PC</math> including 0 lags of <math>(1-L)ld\_PC</math> (max was 2. criterion AIC) sample size 22 unit-root null hypothesis: <math>a = 1</math> with constant and trend model: <math>(1-L)y = b_0 + b_1*t + (a-1)*y(-1) + \dots + e</math> estimated value of <math>(a - 1)</math>: -1.37453 test statistic: <math>\tau_{ct}(1) = -4.22862</math> asymptotic p-value 0.003983 1st-order autocorrelation coeff. for e: -0.112</p>

Source: Authors' calculation and GRETL output

The third set of tests for the variables for Nigeria.

<p>Augmented Dickey-Fuller test for <math>ld\_GDP</math> including one lag of <math>(1-L)ld\_GDP</math> (max was 2. criterion AIC) sample size 21 unit-root null hypothesis: <math>a = 1</math> with constant and trend model: <math>(1-L)y = b_0 + b_1*t + (a-1)*y(-1) + \dots + e</math> estimated value of <math>(a - 1)</math>: -0.715347 test statistic: <math>\tau_{ct}(1) = -4.91629</math> asymptotic p-value 0.000262 1st-order autocorrelation coeff. for e: -0.012</p>	<p>Augmented Dickey-Fuller test for <math>ld\_FDI</math> including 0 lags of <math>(1-L)ld\_FDI</math> (max was 2. criterion AIC) sample size 22 unit-root null hypothesis: <math>a = 1</math> with constant and trend model: <math>(1-L)y = b_0 + b_1*t + (a-1)*y(-1) + e</math> estimated value of <math>(a - 1)</math>: -1.24033 test statistic: <math>\tau_{ct}(1) = -5.56339</math> p-value 0.0009571 1st-order autocorrelation coeff. for e: -0.019</p>
<p>Augmented Dickey-Fuller test for <math>ld\_GC</math> including 0 lags of <math>(1-L)ld\_GC</math> (max was 2. criterion AIC) sample size 22 unit-root null hypothesis: <math>a = 1</math> with constant and trend model: <math>(1-L)y = b_0 + b_1*t + (a-1)*y(-1) + e</math> estimated value of <math>(a - 1)</math>: -1.3434 test statistic: <math>\tau_{ct}(1) = -6.23776</math> p-value 0.0002351 1st-order autocorrelation coeff. for e: -0.110</p>	<p>Augmented Dickey-Fuller test for <math>ld\_PC</math> including 0 lags of <math>(1-L)ld\_PC</math> (max was 2. criterion AIC) sample size 22 unit-root null hypothesis: <math>a = 1</math> with constant and trend model: <math>(1-L)y = b_0 + b_1*t + (a-1)*y(-1) + e</math> estimated value of <math>(a - 1)</math>: -0.974853 test statistic: <math>\tau_{ct}(1) = -4.22845</math> p-value 0.01544 1st-order autocorrelation coeff. for e: -0.076</p>

Source: Authors' calculation and GRETL output

The final set of tests considers the stationarity of the variables for Indonesia.

<p>Augmented Dickey-Fuller test for <math>ld\_GDP</math> including 0 lags of <math>(1-L)ld\_GDP</math> (max was 2. criterion AIC) sample size 22 unit-root null hypothesis: <math>a = 1</math> with constant and trend model: <math>(1-L)y = b_0 + b_1*t + (a-1)*y(-1) + e</math> estimated value of <math>(a - 1)</math>: -1.07987 test statistic: <math>\tau_{ct}(1) = -4.72674</math> p-value 0.005532 1st-order autocorrelation coeff. for e: -0.023</p>	<p>Augmented Dickey-Fuller test for <math>ld\_FDI</math> including 0 lags of <math>(1-L)ld\_FDI</math> (max was 2. criterion AIC) sample size 22 unit-root null hypothesis: <math>a = 1</math> with constant and trend model: <math>(1-L)y = b_0 + b_1*t + (a-1)*y(-1) + e</math> estimated value of <math>(a - 1)</math>: -1.46982 test statistic: <math>\tau_{ct}(1) = -7.25802</math> p-value 2.962e-005 1st-order autocorrelation coeff. for e: -0.138</p>
<p>Augmented Dickey-Fuller test for <math>ld\_GC</math> including 0 lags of <math>(1-L)ld\_GC</math> (max was 2. criterion AIC) sample size 22 unit-root null hypothesis: <math>a = 1</math> with constant and trend model: <math>(1-L)y = b_0 + b_1*t + (a-1)*y(-1) + e</math> estimated value of <math>(a - 1)</math>: -1.04536 test statistic: <math>\tau_{ct}(1) = -4.58779</math> p-value 0.007381 1st-order autocorrelation coeff. for e: -0.031</p>	<p>Augmented Dickey-Fuller test for <math>ld\_PC</math> including 0 lags of <math>(1-L)ld\_PC</math> (max was 2. criterion AIC) sample size 22 unit-root null hypothesis: <math>a = 1</math> with constant and trend model: <math>(1-L)y = b_0 + b_1*t + (a-1)*y(-1) + e</math> estimated value of <math>(a - 1)</math>: -1.16532 test statistic: <math>\tau_{ct}(1) = -5.14814</math> p-value 0.002293 1st-order autocorrelation coeff. for e: -0.019</p>

Source: Authors' calculation and GRETL output

## 4. CONCLUSION

The MINT economies represent emerging and rapidly growing economies, albeit with a very significant differences. These countries will be more and more important for the world economy and for the world in general. The extremely important geostrategic position of Turkey will always boost its significance. The strategic value of Nigerian oil will exist as long as there is oil in Nigeria. Besides that, Nigeria is the only country that fulfill the role of stabilizer in the Western Africa and the Gulf of Guinea region. The central, albeit also disperse geographic position of Indonesia in the part of the Asia-Pacific Rim between South-East Asia and Australia, due to the increased Chinese ambitions and the US presence in this maritime region means that

Indonesia is very important, strategically and politically, even now. Mexico can position itself as a land bridge between North and South America, and use its resources and relatively cheap labor force to boost its development. However, the MINT are not the new BRICS, and they never will be. They simply lack the size, as well as the economic, political, and military power. The MINT countries can (and very likely will be) be regional powers and the economic powerhouses among the emerging economies, but hardly anything more than that, which is nevertheless a remarkable improvement if we compare it to their relative political significance and economic power from a couple of decades ago.

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## REFORM OF INVESTMENT POLICY IN THE FUNCTION OF SUSTAINABLE DEVELOPMENT WITH SPECIAL EMPHASIS ON INVESTMENT IN INFORMATION TECHNOLOGIES

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### ABSTRACT

*Global economy still records a decline in FDI. The main causes are increased economic instability and geopolitical risks. Given the continued negative trend, it is clear that it is necessary to reform the investment policies at the national, regional, bilateral, multilateral and international level, to ensure sustainable economic development. Key elements of the reforms are: to provide instruments to reduce risks, create mechanisms of responsible investment, improve the structural coherence and promote regional investments. Refer to the current dates of the sectors investments (according to the report of UNCTAD from 2015th) shows that the services sector recorded double growth compared to the investment in the manufacturing sector in 2012. Also, if we take into consideration the fact that investment in IT sector investment involves three aspects: transactional (minimizing costs), strategic (innovation technologies, achieving competitiveness) and information (improving access to information and communications), it may be assumed that the reforms in the investment policies should be directly correlated with investments in information technology.*

**Keywords:** *economy, investments, investment policy, sustainable development, information technology*

### 1. INTRODUCTION

The global economy in the last two decades is facing great instability. The causes are many, but they can be generalized into two categories. The first determinant is the increasingly dominant economic gap between developed and developing economies. It has been shown by the latest data from the World Investment Report 2015 by UNCTAD. It indicates a drastic new decline in foreign direct investment by 16% compared to 2014. On the other hand, it has been recorded the highest participation and inflow of foreign direct investment in developing countries with 55%.<sup>1</sup> The movement of investment is very different depending on the region, but also the type and structure of investments. Thus, Asia has become the largest investment region in the world, while developing countries have a favorable trend of greenfield investment and cross-border mergers and acquisitions. Looking at the sectoral investments, more important is the role of the services sector in total investments, with special emphasis on M & A in this sector, where in 2014 compared to 2013 year was recorded a growth of 28%.<sup>2</sup> Another determinant, with which is facing the world economy, is growing economic and geopolitical risks. Economic risks points to the growing risk of investors due to the lack of transparency, information, conflict of interest subjects in corporations and bad communication links, which often leads to time irrelevant

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<sup>1</sup> WIR 2015, Reforming International Investment Governance, UNCTAD 2016, taken: 01.03.2016., p.2

<sup>2</sup> Ibid p.13

information and slow down the decision making process, speculative activities, etc. Geopolitical risks are growing, with an increase in politically unstable areas, and even a growing number of territories under conflict.

All previously disclosed points for the necessary changes and reforms of investment policy at different levels of economic activity from the national to the global economy. The essence of these reforms should be based on the creation of mechanisms that will mitigate or eliminate risks, create instruments for their implementation and improve the structural coherence and investment process. By the analysis of the determinants of the environment and aims to be the focused by new investment policy framework, it can be concluded that the potential should be focused on the services sector, with special emphasis on information technology. Investing in IT sector will allow the reduction of risk as a result of the reduction of transaction costs by strengthening communication links but also contribute to greater transparency and relevance in approaches to information, which will enable greater efficiency in the strategic positioning of the company and the building of new innovative tendencies that are a prerequisite for sustainable development.

From these statements we can form the assumption of this study that reforms in investment policy should be directly correlated with investments in information technology.

## **2. WORLD INVESTMENT POLICY - CURRENT SITUATION**

Based on the Report of UNCTAD in 2015 the main investment trends in 2014 can be defined as follows:<sup>3</sup>

- 80% of the investment policy defined in the direction of liberalization and improving the general conditions,
- Only 8% rate had specific goals in the direction of strengthening the role of the private sector in the construction of sustainable development such as infrastructure, health, education, etc.
- 31 new international investment agreement is concluded, with an emphasis on sustainable development,
- At least 50 countries have underwent revision and control of the existing investment contracts,
- 228 countries have specific requirements in national treatment in completed acquisitions or investments,
- 42 new investment dispute is opened (about 7%) between the countries - investors, a total of 608, of whom 36% received the country, and 27% investor.

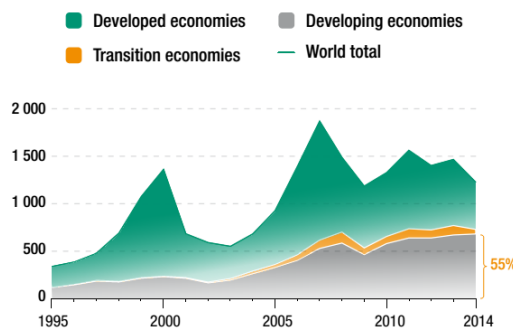
Preliminary data indicates that there is a large movement in the investment policy and suggest the need for reform.

Global trends, however, have to be considered suspended due to variations in regional structural trends, particularly between developed countries and countries in transition. Exactly, so speaking, the global FDI declined by 16%, the share of developing countries is historical 55% of the total investments. Investments by developed countries fell by 28%, and in Europe declined by 11%. (Figure No. 1)

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<sup>3</sup> According: Ibid p. XI

**Figure I.1.** FDI inflows, global and by group of economies, 1995–2014 (Billions of dollars)



Source: UNCTAD, FDI/MNE database ([www.unctad.org/fdistatistics](http://www.unctad.org/fdistatistics)).

Fig. 1 FDI inflows, global and by economic development

Source: UNCTAD, WIR 2015 p.2

Inflows to countries in transition decreased by 52% as a result of regional conflicts and sanctions. Also, most of the economy, regionally monitored, recorded a decline in investment, as a cause of global trends and geopolitical factors. The possibility of improving these trends can be seen in reducing transaction costs and increasing market through certain aspects of regional economic groupings. Developing countries and their MNCs mostly invested through greenfield investments and M & A in cross-border cooperation. Also, it is important to emphasize that the possibility of greater investment may lead through regional integrations by strengthening the value of chain i.e. investing in technological development.<sup>4</sup>

After a downward trend in the past M & A in cross-border co-operation in 2014 increased by 28% compared to 2013. A very important fact is that this trend has been observed in all economies, with the notice that the developed countries grew by 16% and countries in transition growth was 66%. Very important role of M&A is in the service sector (36% growth), especially in telecommunications and particularly in Europe. It is interesting that 50% of M & A in developing countries was the purchase of property by developed economies.<sup>5</sup>

When observing the sectors, the latest available data shows that the services for a period of 2001 - 2012 SDI increased by 63%. As a result of such developments is increasing liberalization, particularly in the finance and telecommunications. In the services sector recorded the growth of cross-border M & A by 37%.<sup>6</sup>

<sup>4</sup> Izvor podataka: WIR 2015, Reforming International Investment Governance, UNCTAD 2016, p. 2-8

<sup>5</sup> Ibid p.8-12

<sup>6</sup> Ibid p.12-15

In conclusion, there is the fact of a significant proportion of investments that are aimed to reduce the transaction costs and all important share of cross-border M & A, as a result of the risk reduction in the volatile market and a growing share of the service sector in cross-border investment. Trends indicate the problems of international investment, but also reveal the directions of future developments, as well as possible instruments defined in the function of reducing risk.

### 3. INVESTMENT POLICY REFORMS

Analyzed situation in the investment at the global level, necessarily points to the need for the implementation of investment reforms. Emphasis of investment risks jeopardizing the implementation of investment policies at all levels and all subjects as participants, in particular stakeholders. According to the reports and conclusions of UNCTAD's investment policy reforms should focus on four levels and include five areas.<sup>7</sup>

Four levels include:<sup>8</sup>

- National,
- Bilateral,
- Regional,
- Multilateral level.

Five areas which require reform in investment policies are as follows:<sup>9</sup>

- To preserve the right to regulate public interests,
- Reform of investment disputes,
- Strengthening the promotion and facilitation of foreign investment,
- Ensuring investor's responsibility,
- Improving the system of coherence.

Creating new mechanisms to reform the investment policy at the national level is the first step. In this sense, it is necessary to create a strategic approach in defining the criteria and framework necessary for investment reforms and the establishment of a new framework with the aims of: reducing volatility and risk, increase the efficiency of investments, institutional strengthening and infrastructure construction.

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<sup>7</sup> <http://investmentpolicyhub.unctad.org/News/Hub/Home/469>, *Reforming the IIA Regime - a Stocktaking* download: 01.03.2016.

<sup>8</sup> WIR 2015, Reforming International Investment Governance, UNCTAD 2016, p. 165-166

<sup>9</sup> Ibid p.128

At the **bilateral level** it is necessary to reform instruments focus on joint action in terms of better understanding, cooperation, negotiation of the parties, in the direction of achieving consensus.

**Regional level** of IIA reform has viewpoint from the defining the criteria and the areas of construction and interpretation of common model, rationalization and implementation.

**Multilateral level** of IIA reform aims to achieve consensus in developing a common vision of the necessary investment reforms, with particular emphasis on defining specific actions, such as determining the criteria and guidelines for systemic reforms, developing instruments and institutional frameworks, research and analysis at the multilateral level, coordination, technical support the construction of a platform based on best practices.

In terms of the areas in which it is necessary to implement investment reforms, the first relating to the **preservation of law regulation of public interest**, including the assessment of costs and benefits in signed contracts IIA. The common approach to creating a favorable climate is partly created restrictions on the maintenance of law regulation in accordance with national policy. The state must preserve law regulation to protect the public interest or the objectives of sustainable development. This involves a review of existing arrangements and the conclusion of the new IIA called "New Generation". In these activities, UNCTAD emphasizes the important role of civil society.

The existing model of **settlement of investment disputes** highlights the unequal position of the host country and investors, in terms of higher risk which is exposed to the host country, the unequal position of domestic and foreign investors, lack of transparency and independent arbitration. The new model has to be built mechanisms that will eliminate the restrictions listed above in a function of providing fair procedures.

**Promotions and investment facilitation** must be directly linked to the objectives of national policy in terms of sustainable development. This section includes interactive cooperation entities at the national level with other levels in defining international investment policy, both in general, and in individual cases.

**The responsibility of investors** in the current model of IIA was minimized, even in certain national legislations and protected. The reform of the investment policy, as one of the key tasks, set goals of building responsibility towards the maximization of benefits and contributions and to minimize the negative implications.

**System coherence** has not shown its strength, so the reform is also focused in that direction. A large number of unsolved and inconsistencies of certain issues and the lack of international legal instruments to address them, imposed the need to find solutions in the new model investment policies. It is necessary to define instruments which will lead to the required coherence at national and international level.

Considering all the shortcomings of the existing defined investment model, as well as directions and a framework in which reform is implemented and submitted an indicative model of reforms, it is necessary to find adequate instruments of implementation of defined activities, but also the focus of structural investment policy in the direction to provide the most effective results. As one of the directions may be investing in information technologies, which provide long-term



sustainable development, but also contribute greatly to the realization of the goals set in the reform of investment policies at the international level.

#### 4. INVESTMENTS IN INFORMATION TECHNOLOGIES

In the analysis of international investment trends, and future reforms in this area, it is clearly evident the need of companies to reduce costs and risk, but also the role that they have in this area with IT technology, so it is not surprising that the increasing investment in this services sector.

In the past decade need of investments in the IT sector was modestly emphasized, because of the reasons of conflicting opinions of these investments. However, today it is clear that IT investments are with long-term profitability and not just the short-term increase in current productivity measured.

The original investment in the IT sector has been focused on cost analysis and customer satisfaction as a function of the delivery.<sup>10</sup> Brynolfsson and Hit in 1993 in one study have shown that investments in the IT sector are more cost-effective compared to other investments, and that they should be analyzed from three angles: productivity, profitability and consumer surplus.<sup>11</sup>

Based on their findings and trends in investment flows, it can be concluded that investment in IT technology has a threefold effect:

- Transaction
- Strategic
- Information

**Transaction effects** of investment in IT is to reduce costs, and thus reducing the risk that is now extremely stressed about the volatility and instability in the world economies, including the regional and global levels. This transaction effect of investment in IT is in line with a defined reforms in investments.

**The strategic effect** is reflected in the long-term effect of IT investments, and creating a system that is adaptable to rapid market changes, enhances the value chain, and therefore the needs of sophisticated customers/consumers. Thus, this effect is directly correlated with the construction of competitiveness, which is a necessary precondition for the sustainable development.

**Information effect** is one that is usually related to investments in IT with aim to improve the flow of information and communication, which is also recognized as a necessary precondition for the creation of a better investment framework.

All three effects of investments in IT, largely correspond to the set levels and areas of operation of the necessary reforms towards improving investment policies.

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<sup>10</sup> According to Stewart, Coulson & Wilson, Information technology: When is it Worth the Investment?, Communication of the IIMA, Volume 7, ISsue 3 2007., p.119

<sup>11</sup> ibid p.120

## 5. CONCLUSION

Analyzing the condition of investments globally, we are revealing the major changes in trends and developments, both in geographical and regional criteria, as well as to the structure and type of investment. The result of such determinants are unstable and risky economic activity at the global level, but also geopolitical situation. As a result, some economies have already accessed the revision of investment contracts, and in the course of planning the reform of investment policy at the international level, which will cause the reform at regional and national levels. The main objective of this reform is focused in five directions, and they are: the preservation of the rights of the public interest regulation, better regulation and the resolution of investment disputes, promotion and facilitation of the investment, the greater responsibility of investors and building system coherence. In finding new investment model that can respond to the appointment of the requirements and objectives, investment in information technology may be one of the most effective instruments, because the effects of their investments are three-dimensional (transactional, strategic and information) and presentation of the significant terms of contribution to the construction of an efficient system of investment with long-term, strategic sustainable development. *In this way, this study confirmed the hypothesis that the reforms in the investment policy should be directly correlated with investments in information technology.*

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## VALUATION OF SHARES AND THEIR FAIR VALUE OF THE COMPANIES LISTED ON THE WIG20 QUOTED ON THE WARSAW STOCK EXCHANGE IN POLAND WITHIN 2006-2016

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### **ABSTRACT**

*This paper examines share price of the companies listed on the WIG20 and their fair value between 2006-2016. Data from Q1 2006 to Q1 2016 was 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.*

**Keywords:** *stock exchange, share valuation, fair value, companies, WIG20*

### **1. INTRODUCTION**

Evaluation of shares allows to some extent for determining the company's value as a share value does not depend exclusively on demand and supply on the market, but also on many factors which shape its rate starting from valuation of an enterprise by means of different methods up to showing the mechanisms changing the share value in a way increasing its value or underrating it. Therefore, valuation of shares and estimation of their fair value is extremely important. This must be done in an objective manner. Repeatedly, the value of shares listed on WIG20 of the Stock Exchange is distorted and underrated, which is connected with an incorrect valuation of an enterprise's value listed on the Warsaw Stock Exchange. The research concerns the determination of fair value of shares listed on the index of WIG20 when analyzing simultaneously chosen rates of particular companies from WIG20. The value of enterprises listed on this index was checked for proper determination of their fair value as currently their values appears to be underrated.

### **2. VALUATION OF SHARES**

Shares are the most important group of financial instruments listed on the Warsaw Stock Exchange. In 1991, during the first quotation, the shares were the only financial instrument. At the end of the 90s, the structure of the Warsaw Stock Exchange changed as other financial instruments, including forward contracts, were introduced to turnover. On the first exchange session, shares of 5 companies were listed. In the subsequent years, there was observed an increase in the number of companies and their market value.

A share is an instrument combining rights of property and non-proprietary character which result from shareholder's participation in a joint-stock company or a limited joint-stock partnership, and the sum of rights and obligations that a shareholder has within the framework of a company or a partnership or a part of a share capital.

When purchasing shares, it is possible to distinguish the rights vesting with a shareholder and group them into property and non-proprietary (corporate) rights. These rights, in principle, are equal. However, it is possible that on the basis of a company's articles of association some shares are assigned with special rights or particular obligations.

The following property rights are vital for the valuation of shares (Borowski, 2013, Bossa.pl):

- right to a dividend (share in a company's <http://pl.wikipedia.org/wiki/Zysk> profit assigned for division among shareholders),
- right to participation in the division of assets of a company in the case of its liquidation,
- right to subscription of shares of a new stock issue (The Code of Commercial Companies and Partnerships grants the hitherto shareholders a right to taking up of shares on a new stock issue in the case of an increase of a capital by a company).

A share is a part of a company's capital. A person holding shares of a joint-stock company becomes a shareholder of a company who is, in a way, a co-owner of everything that constitutes company's assets (immovables, machines, etc.).

Two basic types of shares can be distinguished: registered and bearer's shares. A fundamental difference concerns the turnover of these shares. Registered shares, contradictory to bearer's shares, are not placed on a public market. Registered shares may be preference shares connected, for instance, with a right to vote (2 votes – 1 share) or dividend.

One of the elements of a fundamental analysis, which is most important, is valuation of shares. When making investment decisions, an investor should know if a company they want to invest in is not underrated or overestimated by a market. By means of valuation it is possible to estimate the risk associated with an investment.

There are 4 approaches of valuation of shares (Copeland, 1997, pp. 65-69; Kufel, 1992, pp.78-89):

1. Accounting approach
2. Liquidation approach
3. Multiplier approach
4. Revenue approach

Re 1. An accounting approach is also known as a method of a net asset value. It consists in estimating a company's value (as for a single share) by means of reducing the value of assets by company's liabilities. Then, the result is divided by the number of issued shares. This method is used rarely as it does not make allowances for market realities and development prospects.

Re 2 A liquidation approach consists in determining the value of income due to the sale of assets in the moment of liquidating a company. This method is used when a company is liquidated or merged with another one.

Re 3 A multiplier approach, aka comparative or indicative, relies on valuation of a company on the basis of shares belonging to other companies that are similar to the one in question. Usually,

such comparison refers to companies of the same area of activity in a given sector. Most common indicators used in this method are:

- price/profit
- price/accounting value
- price/sale

Re 4 Approach based on a revenue model Valuation is made by means of a method of discounted cash flows.

- Model of discounted dividends.

A ratio analysis is most commonly used by investors due to its simplicity. The above-mentioned indicators were used to illustrate this valuation for an analysis. The first one is an indicator: price/profit.

$P/P = \text{price of one share} / \text{net profit for one share}$

Another indicator is the price/company's accounting value ratio. As it was in the previous case, the calculation requires the use of a price of one share and accounting values (assets – liabilities) per one share of a company, where the value is achieved by dividing an accounting value by a number of company's shares (Jajuga, 1996, pp.34-57).

$P/BV = \text{price of one share} / \text{accounting value for one share}$

The last indicator is price/net sales. In order to obtain this measure, it is necessary to hold data about sale per one share (quotient of incomes from sales and a number of issued shares), and a value of one share.

$P/S = \text{price of one share} / \text{net sales for one share}$

All information concerning an accounting value, net profit and sales includes an annual financial statement prepared by companies. One may use quarterly reports of companies to forecast indicators. Apart from the aforementioned indicators, there are many other types of them which may make the financial situation of a company known.

When valuating shares, one should also use the model of discounted dividends. This model is one of the oldest and most commonly used ones. It is dedicated to minority shareholders. In an adverse situation, when valuation is made by a person having control over a company, a decision regarding the pay out of some part of the profit is made by the person themselves. Here, a dividend policy is of no importance for the valuation. There are the following models of discounted dividends:

- constant dividend value model
- constant dividend growth model (by Gordon)
- two-stage model
- H model
- three-stage model

A constant dividend value model, as indicated by its name, assumes that a dividend will be paid out in the same amounts at all times (Pierce, 2004, pp.124-145; Thompson, 2008, pp.45-67; Valea, 2001, pp.88-125):

$$P = (D / R)$$

D – dividend

R - return rate expected by an investor

Situations arising from this model are encountered very rarely.

Another method is worked out by Gordon. It is one of the easiest and commonly used models. It assumes that a growth rate of a dividend will be stable:

$$P = [D_1 / (r - g)], \quad r > g.$$

P - share value,

g - dividend growth rate,

D<sub>1</sub> - dividend (per share) paid out in the following year,  
r - required return rate.

Formula for a growth rate of a dividend:

$$g = ROE \times f$$

ROE – rate of return from equity capital

f – retention rate (quotient of a retained profit and a net profit)

The two-stage model, as its name suggests, consists of two phases: a growth period at a constant speed  $g_0$ , and then at a constant speed  $g$ :

$$P = D(1+g_0) \left[ \frac{1}{r-g_0} - \frac{(1+g_0)^N}{(r-g_0)(1+r)^N} + \frac{(1+g_0)^{N-1}(1+g_1)}{(r-g_1)(1+r)^N} \right]$$

The H model assumes that a growth rate of a dividend will decrease linearly at the beginning (from the level  $g_0$  to  $g$ ), and later on it will increase at a constant growth speed  $g$ :

$$P = \frac{D_0(1+g) + D_0H(g_0 - g)}{r - g}$$

H – half of the period when there is a linear decrease in a growth speed of a dividend.

The remaining signs are equal with the previous model by Gordon.

The difference between the three-stage model and the H model is that at the beginning there is an additional regular period in which a dividend rate grows in at a constant speed  $g_0$ , whereas other assumptions are identical as it was in the previous model.

Thus, valuation of shares consists in determining its value to identify underrated or overestimated shares. For that reason, it is necessary to carry out a technical (fundamental) analysis and check if the price of a share corresponds to a company's value.

### 3. FAIR VALUE OF LISTED COMPANIES

Share price of the companies listed on the Stock Exchange should reflect also their fair value (Pierce, 2004, pp. 124-145). The fair value can be defined in several ways. In view of the foregoing, the fair value is a value used repeatedly in accounting, and thus in Article 28 (6) of the Accounting Act of 29.09.1994 as "the amount for which a given asset component could be exchanged, and the liability could be paid on market transaction terms between interested and well-informed, unrelated parties.

In view of whether the price of shares that are quoted on the stock exchange corresponds to their fair value, should be found in the value alone, since, after all, the values may be diverse, like the value of a similar company, producing similar goods and operating in the same industry, will also be diverse for various reasons.

The subject of trade covers minority shares, and the main market participants are retail investors or minority institutional investors, thus the price of shares should reflect the fair value characterizing the liquid minority interest (Borowski, 2013, bossa.pl).

The value presented in this way seems righteous, which is confirmed by the premium paid by the investors who announce calls for subscription for shares and plan in this way the purchase of the controlling interest. Then the premium reflects the difference between the level of liquid minority interest and the level of controlling interest. Sometimes the level takes into account benefits resulting from synergy. An investor purchasing the controlling interest in this way receives

premiums that appear after taking over control of a company, in the form of funds, business management and making a number of strategic decisions.

The fair value of the share price should be determined in accordance with the idea of capital market, namely the market participants should have equal access to data, information and all messages concerning a given company. However, the investors are divided into three groups:

- a) People with access to the most closely guarded information that affects the price and the business value, namely those can the company's management board or shareholders,
- b) Institutional investors with blocks of shares with simultaneous access to the company's management board,
- c) Individual investors who have access to public information.

At this point, there should be no differences in particular groups, at least officially, however, it happens that a group that is closest to the company has information which can obviously change its value overnight or distort its value artificially, e.g. other data or informal data, and even fictitious data.

Worldwide we can also appreciate companies that treat individual investors seriously, namely provide them data concerning a company and treat them as equal and as strategic investors, with a large impact on a company in the present and in the future.

Transactions that are concluded on the Warsaw Stock Exchange relate to transactions between interested parties, namely a purchase or sale order should be submitted. Sometimes there are cases of wrongly submitted orders, but these are marginal orders that do not have a large impact on the transactions conducted on the Warsaw Stock Exchange.

Share liquidity is understood as a percentage quantity of shares in a company that are in the possession of minority shareholders. This is, at the same time, free float and the face value of such shares and the value of average daily trade in shares in a given company (Kufel, 1992, pp. 78-89).

Thus, we may presume that if during a day a large trade in shares takes place and a greater part of shares remains in the hands of minor shareholders, the share price reflects their fair value. We cannot agree with the fact that at small or minimum trade the value of shares is reduced to its daily minimum and it would be its fair value. Then it is only a change in the share price to a lower one and it does not indicate its fair value, as the trade alone suggests that this is only a pure coincidence. Such an impact can be exerted by large shareholders, as they can, by using one block, decrease the share value, preventing smaller players from raising the price for one reason: the capital of smaller shareholders does not enable them to raise the share price (Veale, 2001, pp. 88-125; Frąckowiak, 1998, pp. 34-42).

There is one premise more to determine the fair value of share price. The investors are fond of investing in shares, namely they buy them as in the past they managed to earn on them and they feel that presently the share price is ideal and reflects their fair value and will enable them to obtain fair dividend in the future.

Such a purchase or sale of shares can largely overestimate or underestimate the share value of a quoted company. Here the IT industry may serve as an example, namely shares in technological companies at the beginning of the new millennium, when shares in these companies were being



purchased without any analysis in technical terms, but looking at their name and value, which was increasing overnight. In view of the foregoing, this led to excessively high business value above its fair value (Thompson, 2008, pp. 45-67).

The share price should thus reflect the fair value of a company listed on the Warsaw Stock Exchange. For the value of these companies be fair, the market must make available to all investors information regarding companies listed on the Warsaw Stock Exchange. The shareholders should be treated equally; therefore we cannot distinguish majority shareholders as those who should have information unavailable for minority shareholders. First of all, shares should be liquid securities, therefore they should be in free float and have real-time transferability, namely at any moment and at any time during the office hours of the Warsaw Stock Exchange on a business day (The analysis of 233 recommendations or analytical reports issued by broker's offices in the period from January 2014 to January 2015, concerning 41 companies comprising the WIG20 and mWIG40 indexes of the Warsaw Stock Exchange).

#### **4. WIG20 AND SHARES IN THE COMPANIES LISTED ON IT**

The WIG20 stock exchange index is an index of the 20 largest joint-stock companies listed on the Warsaw Stock Exchange. A base date for the index is 16th of April 1994 and a base value is 1000 points. It is an index of a price type (only prices of transactions included therein are taken into consideration when calculating its value). Up to 5 companies from one sector can be listed within the framework of WIG20. Investment funds are not listed in this index. On the 23rd of September 2013, 10 new companies joined the index creating WIG30. WIG20 will be still published until 31st of December 2015. The lowest value of WIG20 was recorded upon closure on the 28th of March 1995 as 577.90 points, and the highest one on the 29th of October 2007 as 3917.87 points.

A selection of companies included in the WIG20 index depends on their market capitalization and turnover value of their shares. A sine qua non condition of entering the index is:

- number of shares in a free circulation is higher than 10%,
- value of shares in a free circulation over 1 million EUR,
- company cannot be marked,
- company cannot belong to certain specified segments of the market.

A ranking of companies is created on the basis of points granted according to the formula:

$$R(i) = 0,6 * St(i) + 0,4 * Sc(i)$$

whereas the symbols mean:

- $R(i)$  – company's position in the ranking (i),
- $St(i)$  – participation of a company (i) in total dealing in shares of companies included in the ranking during the last year,

- $Sc(i)$  – participation of a company (i) in a share value in a free circulation of companies included in the ranking as per date of its preparation.

The ranking is common for the indices: WIG20, mWIG40 and sWIG80.

The WIG20 index is calculated according to the formula:

$$WIG20 = \frac{M(t)}{M(0) * K(t)} * 1000$$

whereas the symbols mean:

- WIG20 – value of the WIG20 index,
- $M(t)$  – capitalization of the index portfolio in a session  $t$ ,
- $M(0)$  – capitalization of the index portfolio on a base day
- $K(t)$  – correction factor of the index in a session  $t$

The correction factor is calculated according to the formula:

$$K(t) = K(t-1) * \frac{Mz(t)}{M(t)}$$

whereas the symbols mean:

- $K(t)$  – correction factor in a session  $t$ ,
- $Mz(t)$  – modified value of the market capitalization for a session  $t$  (e.g. added share value of a new participant of the index).

Allowing for a correction factor is intended to naturalize changes in the amount of capitalization of the market, such as: changes in the composition of an index portfolio, payout of a dividend.

*Figure following on the next page*

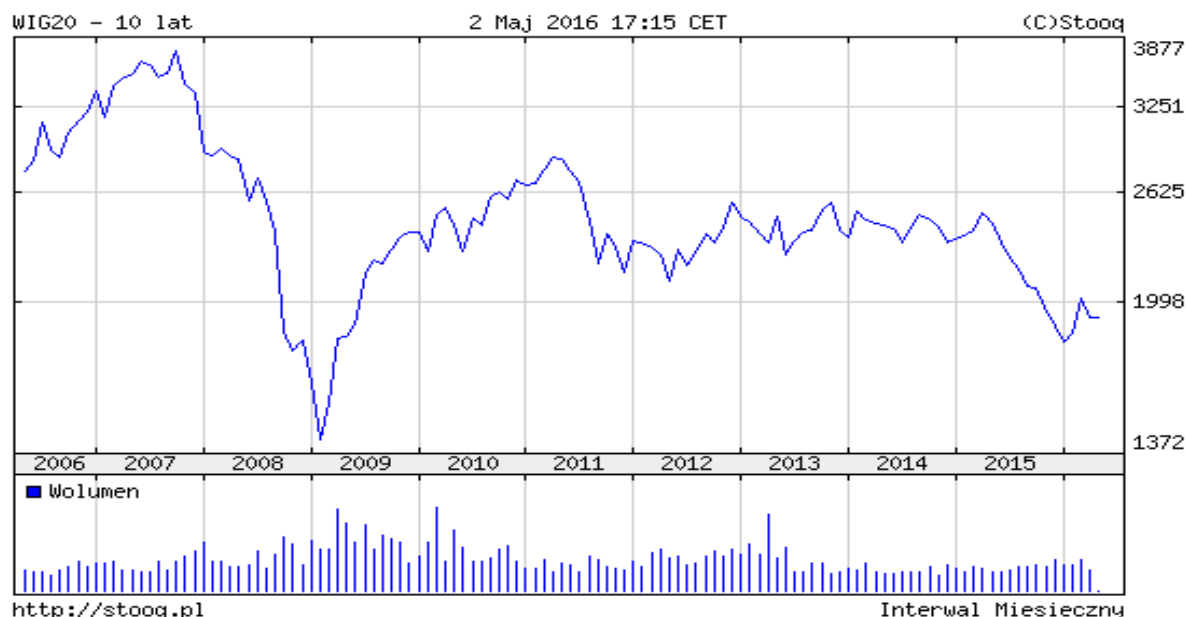


Figure 1: WIG20 index in the years 2006 – 2016 (source: stooq.pl)

In the diagram of the WIG20 index (stooq.pl) within recent 10 years before and after the crisis in 2008, it must be observed that companies listed in this index did not return to their values from 2007 as it was in other EU countries in the indices: DAX, CAC or in the USA in the indices: S&P and NASDAQ. The companies listed in the mentioned indices recovered from the incurred losses and their value is estimates even over the value recorded before 2007, which means that the WIG20 index should reach the value of approx. 4300 points. This would be reflected in the fair value of companies listed therein (Fig. 1).

The diagram of WIG20 P/E (stooq.pl) presents the value as per the 13th of April 2016 (value of 15.84) which proves that a total relation of price to income is on the increase and should reach at least the value of 32. This is because the companies listed in this index have a great financial potential investing properly their financial resources. Yet they have been overrated considerably and their fair value has been underestimated (Fig. 2).

Figure following on the next page

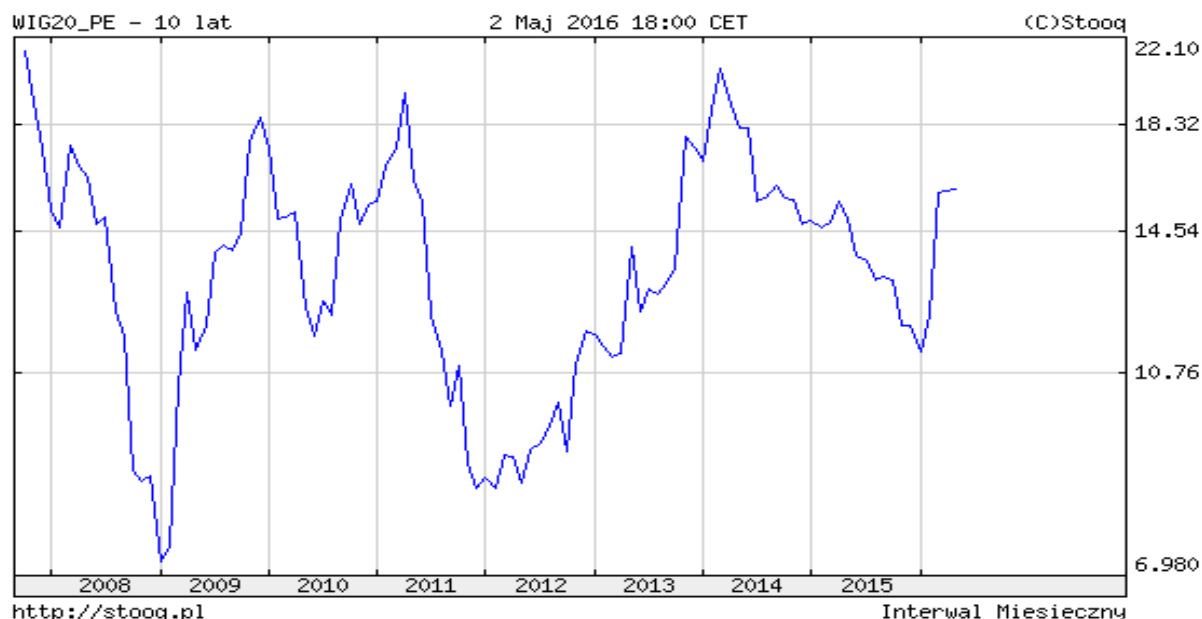


Figure 2: WIG20 P/E in the years 2006 – 2016 (source: stooq.pl)

The companies listed in the WIG20 index are characterized by a good financial condition:

- a) ASSECO POLAND SA - runs a consulting activity concerning software and hardware, production of software, as well as delivery of software and hardware. A comprehensive offer of the company is addressed to a bank and financial sector as well as enterprises and public administrative authorities,
- b) ALIOR BANK SA - is a universal deposit and credit bank which provides services for natural and legal persons as well as other entities appearing on a domestic or foreign market. The fundamental activity of the Bank is connected with holding bank accounts, granting credits and loans, issuing bank securities and dealing with a purchase and sale of foreign currency assets. The group also runs an activity of brokers, financial consulting and mediation as well as other financial services,
- c) BANK ZACHODNI WBK SA - is a universal bank providing a full offer of services for the benefit of individual clients, small and medium enterprises and large companies. The bank was established due the merger of Bank Zachodni SA and Wielkopolski Bank Kredytowy SA. Financial services of the bank include also the service of foreign trading and financial operations on a capital and financial market as well as on the market of foreign currency and derivative transactions. In 2012, there was a merger with Kredyt Bank SA.,
- d) CCC - CCC Group is one of the largest distributors of shoes and one of the biggest producers in Poland. Capital Group consists of: CCC SA, the company that manages sales channels and CCC Factory, multiple plugs produces footwear and CCC Boty Czech s.r.o. subsidiary responsible for organizing the network and the sale of products in the Czech Republic. In addition to our own production company imports shoes from China and Italy. It offers its products through a network of boutiques QUAZI, showrooms and shops CCC BOTI. The Company has approx. 40 trade marks (ie Lasocki).

e) EUROCASH SA - The Eurocash Group is one of the largest groups in Poland if it comes to the sales value and a number of posts dealing with distribution of food products, household chemicals, alcohol and tobacco products (fast-moving consumer goods - FMCG). The Eurocash Group uses different ways of distribution including especially: Delikatesy Centrum, Tradis, PayUp, KDWT and Eurocash Cash&Carry.,

f) CYFROWY POLSAT - is the leading media group in Poland, which is formed of Cyfrowy Polsat and Telewizja Polsat - offering a dozen television channels (such as entertainment, sports, news, business, lifestyle, film and children). The company offers three services available as well as integrated services: satellite pay television, broadband Internet access (HSPA + and LTE) and mobile telephony. From May 2008. Cyfrowy Polsat is listed on the Stock Exchange in Warsaw.

g) ENERGA - The core business of the issuer involves the distribution, generation and trading of electricity. Connected to the distribution network are numerous wind farms, small hydro and biogas. In addition, activities include manufacturing, distribution and trading of heat.

h) ENEA - The basic scope of activities of the ENEA Capital Group includes the manufacture, distribution and trading of electricity. Additional activities are: street-lighting maintenance services, maintenance services network NN, transport services, services for the settlement of gas, rent, lease, sale of goods and social activities.

i) KGHM POLSKA MIEDŹ SA - is the sixth producer of an electrolytic copper and the second one producer of silver in the world. The electrolytic copper from KGHM is registered by the London Metal Exchange (LME) as Grade A, whereas the silver is registered under the brand of KGHM HG. Apart from the above-mentioned metals, the company also produces, among others, gold, lead, sulphuric acid and rock salt. KGHM is one of the leading Polish exporters,

j) LPP SA - the company is engaged in designing and distributing clothes in Poland and Central and Eastern Europe. It commissions and controls the production mainly in the Far East. LPP produces clothes of the following brands: Reserved, Cropp, Re-Kids, Esotiq, Promostars, Henderson, etc. Recently, the company took over the Artman company from Krakow that trades in clothes in stores of House and Mohito,

k) GRUPA LOTOS SA - the Lotos Group is the largest petroleum company in the Pomeranian region. It is the second biggest company in Poland. It conducts the activity within the scope of distribution and sale of petroleum products and goods. The Capital Group of LOTOS SA is a vertically integrated petroleum concern dealing with production and processing of petroleum and distribution of petroleum products. The company is, among others, the leader in the industry of lubricating oils. The companies of the Capital Group provide the market with the products such as: unleaded petrol, diesel oil, furnace oil, jet fuel, engine and industrial oils, asphalt and gases. The capital group consists of about 20 companies which are directly dependent and 10 indirectly dependent companies, including: Lotos Czechowice, Lotos Jasło and the mining ones: Petrobaltic and Lotos Norge.

l) mBANK SA - the mBank Group provides companies and individual clients with a vast offer of products and services which are necessary to satisfy their financial needs. The offer presented by mBank is completed with leasing, factoring and full stock broking. The group also includes a specialist BRE Bank Hipoteczny. The mBank Group provides services within the scope of private banking and wealth management. In 2013, mBank presented its new visual image; the unification

of brands and rebranding of all entities of the group started. mBank, MultiBank, Bre Bank and BRE Private Banking started operating under a new name: mBank,

m) ORANGE POLSKA SA - The company is the largest Polish telecommunication operator. It operates on the market of stationary telecommunications, mobile telephony (through PTK Centertel - the operator of a mobile network Orange), Internet and data transmission. The company also provides services connected with radiocommunications, calling communications, radiophony and dispatcher communications. The Polish Communications Group is the largest telecommunications group in Central Europe.

n) BANK POLSKA KASA OPIEKI SA - operates for 80 years now and is one of the largest banks of Central Europe and the largest bank in Poland in terms of market capitalization. It provides services for approx. 5 million clients, including more than 250 thousand small and medium enterprises and over 15 thousand large companies. It is also a leading bank in Poland and the largest bank in Central-Eastern Europe in terms of capitalization,

o) PGE POLSKA GRUPA ENERGETYCZNA SA - is the largest producer and supplier of electrical energy in Poland and one of the largest companies from the sector of electrical power engineering in Central and Eastern Europe. Due to the combination of its own resources of fuel (brown coal), production of energy and final distribution networks, PGE guarantees safe and stable supplies of electrical energy for about 5 million houses, companies and institutions,

p) POLSKIE GÓRNICTWO NAFTOWE I GAZOWNICTWO SA - PGNiG is the largest company operating on the market of natural gas in Poland. The basic activity of the company includes searching and exploitation of natural gas and petroleum, as well import, storage, circulation and distribution of gaseous and liquid fuels. The group consists of companies which deal with searching, producing, transferring and distributing gas,

q) POLSKI KONCERN NAFTOWY ORLEN SA - the PKN Orlen Group is a dominant producer and distributor of petroleum and petrochemical products in Poland. It is engaged in processing petroleum to such products as: unleaded fuel, diesel oil, furnace oil, jet fuel, plastic and petrochemical products. The refineries belonging to the PKN Orlen Group (in Płock, Trzebinia and Jedlicz) have about 70% of processing capacities of Polish refineries. PKN Orlen sells about 60% of engine fuels wholesale in Poland; the sale retail sale reaches almost 40%. The company has the largest network of petrol stations in Central Europe. They are localized in Poland, Germany, Check republic and Lithuania. The PKN Orlen Group is created by over 80 companies,

r) POWSZECHNA KASA OSZCZĘDNOŚCI BANK POLSKI SA - is the largest universal commercial bank in Poland. It is the leader in terms of the asset value, volume of deposits, credits, number of personal accounts and ATM cards. It has the largest network of its own posts and cash dispensers. It provides its services mainly for retail clients, but it is also a very important partner for both small and medium enterprises and large corporations. In addition, the company has a considerable share in the market of services offered for communes, districts and voivodeships. The Group of PKO Bank Polski, apart from the activity connected strictly with banking, provides specialist services and sells financial (pension funds) and leasing products, units of investment funds and electronic payment services,

s) POWSZECHNY ZAKŁAD UBEZPIECZEŃ SA - is a parent company for all entities constituting the PZU Capital Group. It operates in the sector of property and personal insurances. The Group also comprises PZU Życie, PTE PZU, TFI PZU and PZU Pomoc,

t) PGE - Polish Energy Group SA It is the largest producer and supplier of electricity in Poland and one of the largest companies in the power sector in Central and Eastern Europe. Thanks to the combination of its own fuel (lignite), power generation and final distribution networks, PGE guarantees secure and stable supply of electricity to 5 million households, businesses and institutions (Parvi, 2015, pp. 109-114).

u) TAURON POLSKA ENERGIA SA - The holding company is the largest distributor of electrical energy in the country. The distribution networks of companies included in the group cover 17% of the country's territory. The services of distribution and provided on the area of nearly 53 thousand square meters by means of 187 thousand of power supply lines. The companies concentrated in the TAURON Group sell approx. 30.4 TWh of electrical energy (in 2009) to nearly 4 million of final receivers. Moreover, the holding company controls 20% of the Polish resources of hard coal and reaches the rate of 5% of a domestic production of hard coal.

*TABLE 1: Companies listed on the WIG20 in Poland as of 13.04.2016 (prepared by the author on the basis of the financial data of the WIG20 companies) – Continues on the next page*

Name	Average assessment	rating	Current price PLN	Max price PLN
ALIOR	3.5/5.0	B-	69.90	97.15
ASSECOPOL	4.0/5.0	AA	59.20	113.00
BZWBK	4.0/5.0	B+	294.00	408.30
CCC	4.0/5.0	AAA	156.70	189.50
CYFRPLSAT	4.0/5.0	CCC+	24.43	27.66
ENEA	3.5/5.0	BBB	11.47	20.78
ENERGA	4.0/5.0	BBB	12.72	23.58
EUROCASH	3.5/5.0	CCC	56.50	62.10
KGHM	4.0/5.0	BB	73.25	162.50
LOTOS	4.0/5.0	BB+	27.40	51.22
LPP	4.0/5.0	A-	5849.95	10006.00
MBANK	3.5/5.0	B	339.00	538.40
ORANGEPL	2.5/5.0	BB	6.28	19.59
PEKAO	3.5/5.0	B	154.05	195.10
PGE	3.5/5.0	BBB-	16.65	20.94
PGNIG	3.5/5.0	AA+	5.02	6.86

PKNORLEN	4.0/5.0	AA-	72.01	76.14
PKOBP	3.5/5.0	B	26.27	43.31
PZU	3.5/5.0	B	35.40	46.91
TAURONPE	3.5/5.0	CCC	2.94	5.44

Table 1 contains the most important core values that show financial standing of the WIG20 companies.

The current price of shares of the companies listed on the WIG20 should reflect their business value and their fair value, however, bearing in mind their maximum value, we should note that for well prospering companies their current value differs strikingly from the average or maximum value that was determined during quotations over the last few years, as shown in

Table 1. The share price of some of them has been reduced by 50% (ENEA) and of some by less than 55% (ENERGA), which proves their diverse structure and diverse financial possibilities. With good financial data and generating earnings per share, the companies should resist crisis and stagnation prevailing currently on the world markets. However, it is unjust to quote rating for some companies in a manner showing their weakness, since those companies generate profit and are capable of surviving on the market and maintaining financial liquidity, which is proved by the financial results in tables 2 and 3. PKNORLEN may serve as an example (Parvi, 2014, pp. 33-36; Parvi, 2014, pp. 52-60) .

In the rating, only three companies, EUROCASH, differs from the rest by the lowest grade CCC. Other companies have the grade of the “A” or “B” category.

The share price of some of them has been reduced by 70% (ORANGEPL) and of some by less than 20% (PGNIG), which proves their diverse structure and diverse financial possibilities. With good financial data and generating earnings per share, the companies should resist crisis and stagnation prevailing currently on the world markets. However, it is unjust to quote rating for some companies in a manner showing their weakness, since those companies generate profit and are capable of surviving on the market and maintaining financial liquidity, which is proved by the financial results in table 2. PGE may serve as an example.

Table 2 contains the most important ratios that show financial standing of the WIG20 companies. EBITDA per share is interesting, as it presents operating profit plus depreciation, which shows more effectively the companies with large fixed assets which require a very high capital expenditures characterized by a long period of return. In view of the above, EBITDA is a better ratio than EBIT, as it shows a better image of financial standing of an analyzed company (Parvi R., 2014, 33-36; Parvi R., 2014, pp. 52-60; Copeland, 1997, pp. 65-69).

In view of the so conducted analysis, we can clearly see that only four companies had problem with generating operating profit per share in the 2nd quarter of 2014: ENEA, KGHM, LOTOS and TAURONPE. The other 10 companies generated operating profit per share as presented in Table 2. Almost all companies (10 companies) reduced assets to equity ratio, which resulted in release of equity and larger investment possibilities.



EBITDA per share is interesting, as it presents operating profit plus depreciation, which shows more effectively the companies with large fixed assets which require a very high capital expenditures characterized by a long period of return. In view of the above, EBITDA is a better ratio than EBIT, as it shows a better image of financial standing of an analyzed company [6, 7].

*TABLE 2: Technical assessment of companies listed on the WIG20 as of 31.12.2015 (prepared by the author on the basis of the financial data of the WIG20 companies)*

<b>Name</b>	<b>Net profit (net loss) in thousands</b>	<b>Profit per share</b>	<b>Book value per share</b>	<b>EBITDA per share</b>
ALIOR	39626	0.545	48.315	No data
ASSECOPOL	125900	1.517	64.600	274000
BZWBK	277142	2.793	195.416	No data
CCC	105222	2.740	29.179	133952
CYFRPLSAT	185600	0.290	16.027	943800
ENEA	-1271258	-2.880	25.683	-976992
ENERGA	136004	0.328	21.180	481011
EUROCASH	96997	0.699	7.976	184713
KGHM	-6237000	-31.185	101.055	-6724000
LOTOS	-391314	-2.117	41.715	-145157
LPP	173029	94.493	1032.406	297585
MBANK	309486	7.327	289.836	No data
ORANGEPL	-153000	-0.117	9.125	594000
PEKAO	438364	1.670	89.184	No data
PGE	994000	0.532	21.565	2014000
PGNIG	-21000	-0.004	5.209	771000
PKNORLEN	-81000	-0.189	51.841	257000
PKOBP	444257	0.355	24.227	No data
PZU	509860	0.590	14.966	No data
TAURONPE	-2883958	-1.646	9.140	-2915418

Price to earnings and price to shares express the value in PLN and it is a value characterized by the results of the companies which affect these values (Parvi R., 2014, pp. 262-267; Parvi R., 2014, pp. 169-177). Similarly, price to book value of a company ranges from PLN 0.28 (ENERGA, TAURONPE) to PLN 5.15 (PEKAO). Comparing these values to the maximum values reached by the companies, we should note that the value of PLN 5.15 PLN as maximum (PEKAO) and of PLN 3.62 (BZWBK) were values reached by the companies during their quotations on the market over the last few years (2011-2015).

Generally, the value of the index P/OE is a useful tool for determining an absolute share value referred to the operating profits (table 3). Using the operating profit instead of a net profit (the C/Z index) allows for rejecting single events. Moreover, a net profit is easier to handle. Fewer companies incur losses at the level of an operating profit rather than a net value, which allows for a broader use of P/OE. An operating profit helps to determine the efficiency of an enterprise's activity on the market regardless of a financial situation. It does not depend on a structure of financing, i.e. a relation of foreign and own capitals. An operating profit stands for the profitability of an enterprise. It is clearly visible that these values are added in the case of each company, and even 9 companies have two-digit values, which means that these companies have a very good financial situation (Parvi, 2015, pp. 177-184).

*TABLE 3: Financial ratios of the companies listed on the WIG20 as of 13.04.2016 (prepared by the author on the basis of the financial data of the WIG20 companies) - Continues on the next page*

Name	Price/Profit	P/OE (price/ operating earnings)	Price/BookValue
ALIOR	1.73	13.17	1.45
ASSECOPOL	0.68	6.63	0.59
BZWBK	3.62	9.26	1.42
CCC	2.61	24.21	5.37
CYFRPLSAT	1.59	7.87	1.52
ENEA	0.50	-31.23	0.42
ENERGA	0.28	4.11	0.60
EUROCASH	0.39	24.15	6.72
KGHM	0.73	-3.04	0.72
LOTOS	0.22	11.96	0.66
LPP	2.09	21.33	5.68
MBANK	2.81	8.85	1.17
ORANGEPL	0.70	14.41	0.69

PEKAO	5.15	12.54	1.73
PGE	0.89	-7.11	0.63
PGNIG	0.81	9.00	0.96
PKNORLEN	0.35	7.10	1.27
PKOBP	2.48	10.42	1.09
PZU	1.64	10.40	2.01
TAURONPE	0.28	-2.71	0.32

The P/BV index informs how the company's own capital is valued by the market at a given moment. A general interpretation of the index consists in the fact that the P/BV indices below 1 mean a low price of a company, whereas a value over 3 that a company is overrated. The number of companies of a low value below 1.0 amounts to 9. Thus, these companies are attractive for investors, whereas the value of 3.0 is exceeded solely by two companies, which means that they are overrated. The remaining 8 enterprises are also worth recommendation and attention. In view of the foregoing, we should note that from the above financial data we can calculate fair values of particular companies listed on the WIG20.

The value of the P/P index is expressed in the way that when the value of the index is lower, then the price for the purchased company's shares is theoretically lower too, which means that the enterprise is more attractive. It is used in order to demonstrate cyclic profits and losses of the analyzed companies (the income is much more stable than the company's profit). Therefore, it is evident that most companies (10) have the index close to the value of 2.0 - this stands for the company's attractiveness (Parvi, 2015, pp. 83-88).

*TABLE 4: Values of the companies listed on the WIG20 as of 13.04.2016 (prepared by the author on the basis of the financial data of the WIG20 companies) - Continues on the next page*

<b>Name</b>	<b>Present value</b>	<b>Maximum value</b>
ALIOR	69.90	97.15
ASSECOPOL	59.20	113.00
BZWBK	294.00	408.30
CCC	156.70	189.50
CYFRPLSAT	24.43	27.66
ENEA	11.47	20.78
ENERGA	12.72	23.58

EUROCASH	56.50	62.10
KGHM	73.25	162.50
LOTOS	27.40	51.22
LPP	5849.95	10006.00
MBANK	339.00	538.40
ORANGEPL	6.28	19.59
PEKAO	154.05	195.10
PGE	16.65	20.94
PGNIG	5.02	6.86
PKNORLEN	72.01	76.14
PKOBP	26.27	43.31
PZU	35.40	46.91
TAURONPE	2.94	5.44

From table 4, it can be concluded that the fair value is significantly higher than the current share price of the companies listed on the WIG20. A particular "pearl" in the index may be a well prospering PGNIG that is largely undervalued.

*TABLE 5: Values of the companies listed on the WIG20 as of 13.04.2016 (prepared by the author on the basis of the financial data of the WIG20 companies) - Continues on the next page*

Name	Deviation from the fair value in PLN	Fair value
ALIOR	13.15	83.05
ASSECOPOL	31.30	90.50
BZWBK	60.00	354.00
CCC	23.30	180.00
CYFRPLSAT	2.07	26.50
ENEA	3.73	15.20
ENERGA	8.18	20.90
EUROCASH	5.50	62.00
KGHM	66.75	140.00
LOTOS	11.60	39.00

LPP	3150.00	9000.00
MBANK	111.00	450.00
ORANGEPL	6.52	12.80
PEKAO	25.95	180.00
PGE	3.55	20.20
PGNIG	1.48	6.50
PKNORLEN	3.99	76.00
PKOBP	13.73	40.00
PZU	6.60	42.00
TAURONPE	2.06	5.00

It should be noted that fair values of particular companies listed in the WIG20 index can be calculated on the basis of the above-mentioned data and financial data (Parvi, 2015, pp. 51-67; Parvi, 2015, pp. 82-85).

The Table 5 shows that the fair value is much higher than the current value of the share price of the companies listed in WIG20. Particular jewels in the index may be thriving companies such as: CYFRPLSAT, ENEA, EUROCASH, LOTOS, ORANGEPL, PGE, PGNIG, PKNORLEN and TAURONPE which are greatly underrated.

## 5. CONCLUSION

The share price of companies listed in WIG20 is considerably underrated. However, it may be suspected that the value of these shares is underrated intentionally for the investors moving around the globe with an investment capital which depends exclusively on the profit, i.e. quick purchase and sale of shares, whereas they are not interested in investing and receiving dividends, which is connected with maintaining shares in an investment portfolio. Explicitly, it may be observed that the share price of companies listed in WIG20 differs considerably from the fair value that was calculated and presented in the elaboration. For this reason, it must be particularly stressed that the value should be reached in the future periods, which may be supported by a increasing value of a price/income relation (P/E) in the WIG20 index where the minimum level is left behind. The fair value of companies listed in WIG20 should be reached in the period of two years, i.e. until 2018.

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## THE “MORALITY” OF PRACTICES IN PUBLIC PROCUREMENT

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### **ABSTRACT**

*In the sector of public procurement, we can observe many typical attitudes of a living society. The most interesting part of tendering procedures is the award of a contract. The choice of a contractor is sometimes a matter of “pure” competition, but it happens to be also a result of a less transparent procedure. Such rewards are difficult to discover and certainly the main purpose for avoiding the foreseen procedure is profit making.*

*However, the existence of these practices in a sector (public procurement) which constitutes 14% of global GPA should not only be examined as an illegal attitude, but also as a dangerous one, because the award of contracts in sensitive areas such as health, security or education is required to receive the highest protection. Having the phenomenon of corruption described above as a basis, this paper attempts to reach the source of the problem. Which reasons could urge a contracting authority to decide and award a contract to a person or a company which does not fulfil all the requirements?*

*Is this only a problem of human greed or is it something even bigger? Comparing several societies, this phenomenon is found more or less to all of them. Unfortunately, we do not observe only a disfunctioning in public procurement, but also a global degrading community with lack of values and expectance nothing better than fraud in the most aspects of social life.*

*A change in our biotheory is inevitable and a good beginning could be the education and not the void one, but a vivid and experiential type of education. If well trained people worked at the public services, then the choice of deviation in public procurement could possibly be limited. Finally, education and principal social structures are the “keys” to change the shadowy practices in public procurement.*

**Keywords:** *public procurement – competition- transparency – corruption*

### **1. INTRODUCTION**

The sector of public procurement in the EU represents around 14% of GDP and it may refer to contracts of goods, services and public works. The main Regulations for public procurement<sup>86</sup> have been recently changed and are going to come in force on 18<sup>th</sup> April 2016. This change had been necessary for the modernization of Regulations on public procurement and has been combined with a new Directive, which has been issued for the first time on the award of concession

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<sup>86</sup> Directive 2014/24/EU (“Classical” Directive on contracts for public works, public supply and public service, which has replaced the Directive 2004/18/EC) and Directive 2014/25/EU coordinating the procurement of entities operating in the water, energy, transport and postal services sectors.

contracts. In order to deepen in the practices, we should firstly define the notion of a contract governed by the rules of public procurement.

Public procurement could be called the process that any government departments or agencies of the public sector choose in order to purchase goods, services and works. Only candidates of the private sector (e.g. companies) have the right to participate in the tender procedures. This choice of seeking offers from the private sector can be explained by the necessity for innovation, competition and quality. Taking into consideration that every contracting authority prefers to find the most qualified and effective contractor, when fair competition is established, the possibilities for achieving this goal are maximized.

From all the above, it is presumed the significance of this sector in the growth of a society. What cannot be directly estimated is the social impact that a public contract may have on a specific society and especially, in the field of public works, because for these contracts the implementation of European Directives is obligatory. For example, there are several public contracts for which the Directives are not applicable because the value of auctioned contract is under the thresholds<sup>87</sup>. For this type of contracts only the national law is applicable.

During the period of application of the previous Directives on public procurement, it has become necessary to have an electronic system for public procurement, in order to simplify all procedures. E-procurement, as it is called, contributes to a more transparent and eligible for all contracting parties system. There are several European rules which boost this initiative<sup>88</sup>.

This paper focuses on how the tendencies in the sector of public procurement are related to the quality of a society. In other words, it will be proved that public procurement has not only a crucial economic aspect, but a social, as well. The hypothesis will be supported by several examples, deriving from past infringement cases. In the conclusion, there are proposals for reinforcing the “social profile” of tendering procedures and giving the opportunity to SMEs for an easier access in European Market.

## **2. THE MAIN PROCUREMENT PROCEDURES**

### **2.1. A sense of “morality”**

The concept of “morality” is connected with this of ethics and it refers to basic moral principles, such as transparency and fairness, which regulate the procurement procedures. What is more important to understand, is the fact that “morality” corresponds to a certain type of conduct, which includes commitments to respect the rules, to avoid any practices against law in order to take advantage of others and in general, behave in a way that ensures the protection of rights for all the persons participating in a procedure.

During all procurement procedures, there are cases when parties face moral dilemmas that are never easy to be resolved. A first restraint to these dilemmas is the budget of the contract without a doubt. In other words, the offer should be under the cost of the tendered contract. In case of the criterion of the “lowest price”, for example, do we have always the expected quality of the final product?

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<sup>87</sup> Commission Delegated Regulation (EU) 2015/2170 amending Directive 2014/24 of the European Parliament and of the Council in respect of the application thresholds for the procedures for the award of contracts.

<sup>88</sup> Directive 2014/55/EU on electronic invoicing in public procurement, but also Directive 2014/24/EU on public procurement and repealing Directive 2004/18/EC.



Moreover, the limits between a fair and a self-righteous procedure are sometimes really subtle. And somewhere in the middle, we can find also the protection of human rights. The violation of human rights may happen in any sector of every society, in business, in employment and in procurement, as well<sup>89</sup>. That is why the rules for public procurement should have a social approach. Respectively, in Europe of the free circulation of products, services and persons, there are already rules for procedures, more “green” or “moral”, so that a fair distribution of public resources is established. Of course, these rules should be adapted to the legislation of every member- state<sup>90</sup>, in order to have more effective measures.

When, the sense of “morality”, as described above is missing, we have to face another phenomenon in the world of public procurement, which is called corruption. It refers to this kind of personal or collective effort of an authority or a powerful party through illegitimate means to satisfy mainly selfish interests<sup>91</sup>. This is a general definition, which can be specified depending on the procurement procedure that the contracting authority chooses. Most of times, it is pretty tough to find out who is responsible for such disorders.

In Greece, the phenomenon of corruption is not something new and unfortunately it is commonly found in business activities. In addition, the rules for public procurement in Greece are not codified properly, causing as a result difficulties in their implementation. According to report<sup>92</sup> of OECD concerning corruption, the establishment of an independent authority had been necessary for monitoring the procurement procedures. Consequently, the Hellenic Authority for Public Procurement (HSPPA) had been established by the Law 4013/2011 and it created two main registers, where all the contracting authorities should publish the forecoming contracts. At the same time, there are other decentralized authorities, which have also the task of monitoring the procurement procedures and have the right to intervene, if any rule is violated.

There are three types of procurement procedures: the open, the restricted and the negotiated procedures. The choice of the appropriate procedure depends on the provisions of national legislation. However, in all cases, transparency and equal participation for all economic operators should be assured. It happens, though, sometimes the conflict of interests to be too strong that the access of smaller economic factors may become difficult.

Another procedure of awarding a public contract is concessions. This procedure refers to partnerships between the public sector and mostly private companies. Until today the rules on concession have been complex and different in every member state. For the first time with the Directive 2014/23/EU the award of concession contracts has a common legal frame that gives the opportunity for a better monitoring of European public procurement, if the contracts overcome the threshold<sup>93</sup>.

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<sup>89</sup>Global Business Initiative on human rights, State of play, the Corporate responsibility to respect human rights in Business Relationships, p.49

<sup>90</sup> For example, Netherlands by its constant strategy in public procurement and UK by governmental Act on the protection of human rights in the sector of public procurement, they have developed a protective system in this field.

<sup>91</sup>A.Papakonstantinou, Corruption in Public Administration and politics: the constitutional aspects, Review of Public and Administrative Law, 1/2004

<sup>92</sup><http://www.oecd.org/daf/anti-bribery/Greecephase3reportEN.pdf>

<sup>93</sup> For all works and services concessions over the amount of 5.225.000,00 euros

## **2.2. “Dark” places in open procedures**

Open procedure is a tendering process whereby any interested economic operator may participate. Although an open procedure should guarantee the transparency, it happens to have lack in publicity and mainly at the national level. For example, there are public authorities, which are not informed for their obligation to publish all the stages of ongoing procurement procedures<sup>94</sup> (the decision, the contract notice and finally the award). As a result, many interested parties are excluded in the beginning and they lose their right to submit a tender. There are, also, other cases when a contracting authority “forget” to publish all the stages of a procedure and consequently the interested parties are not well informed for business opportunities.

Moreover, another controversial issue in this procurement procedure may be the choice of criteria for a contract. According to the Directives, the contract award criteria should be precisely defined and guide the participants to prepare their tenders. Most confusing of the criteria is this one seeking for the “most economically advantageous” tender. In this case, there should be a balance between price and quality and also the evaluation of other factors, such as the life cycle of the products used. Furthermore, the “environmental” criterion is very important, especially in constructions. The reports in estimating the above features of a tender are not always clear in the award decision. Even if the criteria in a procurement procedure are clear and the interested economic sectors are well informed, they may not have in time all the necessary documents for participating. In other words, when a contract notice is published, only the obligatory fields by law are completed and if an interested bidder has any questions, there is usually a form whereby clarifications are given. However, it happens that these guidelines are given after the deadline for submission of tenders. As a result, their tenders may be excluded.

Having, also, an open procedure does not mean that a contracting authority cannot communicate with possible suppliers (for services, goods or even works). That is to say, that there is no way to control if this has happened during the procurement procedure. This is a disfunction of the rules and a lack in supervision, very difficult to be covered by the existing legal frame. This certain practice inevitably leads to the violation of free access to all economic operators and convert an open procedure to a restricted one.

## **2.3. “Alterations” in restricted procedures**

If a contracting authority prefers to limit the number of candidates, it may follow a restricted procedure with publication of a contract notice. In this case, the limitation of the candidates should take place using objective criteria. In fact, every interested economic operator may ask to participate in the procedure, but finally the contracting authority invites those which are more suitable according to the criteria to submit a tender. The restricted procedure may be chosen by the contracting authority, in case that the contract may be implemented only by companies specialized.

The most ambiguous stage of a restricted procedure is the list of the invited candidates and how it results. In this list, the contracting authority chooses and at the same time excludes economic operators for the award of the contract. Although the criteria are defined in the contract notice, there is no publicity in the preparation of the list and as a result, any “dilemma” about the invitation to specific economic operators is never known. On the contrary, the contracting authorities avoid having any risk in this decision and it is very common to observe the same cooperations even in

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<sup>94</sup> In Greece, it is obligatory for the public contracting authorities to publish any procurement procedure for supplies over 1000,00 euros.

different types of contracts. Consequently, the right of fair competition is eliminated and such procedures have nothing to contribute in transparency.

On the one hand, it is expected by the contracting authorities to choose the most “secure path” for materializing a project. On the other hand, the choice of a certain partner for the most of the contracts, gives no chance to innovation or competition for a better result. This fact jeopardizes the effectiveness of the contracts, as we have one main player in the procedure. However, it is necessary to enrich the list of economic operators, in order to have a proper functioning of public finance.

Furthermore, another lack of publicity and control can be found in such procedures concerning the prices of supplies. Especially in cases of important public work contracts<sup>95</sup>, the tenders that are finally submitted by the “chosen” partners cannot be compared or checked with other competitors in the same sector. It is common though the results of such cooperations, when the works do not function well or they are not suitable to serve their purpose.

This phenomenon of having a well-known partner in certain projects may cause bigger problems in society. In particular, this kind of companies may obtain such power that sometimes leads to manipulation of public finance, not only in public procurement awards, but also in stock exchange for example. This situation creates opportunities for economic operators that may detour the legal system and take advantage of this “gap” in control.

From all the above, a restricted procedure in public procurement may have multiple impacts on the economy of a society. The lack of competition is one of the problems, but not the only one, as it has been proved that corruption may blossom also in a competitive environment<sup>96</sup>. So, the respect of the rules belongs to a field not so economical, but sociological, as the observation of a not so “moral” conduct, and even corruption has the character of a “fake” ethic that undermines the public good and underlines the personal interests<sup>97</sup>.

#### **2.4. The case of negotiated or procedures of competitive dialogue**

There is a special type of procedure called “negotiated” or this one that takes place with competitive dialogue. The procedure of competitive dialogue is used when the contracts are complex and the corresponding requirements in quality and technical features are extremely specific<sup>98</sup>. In this procedure, the contracting authority publishes the notice of contract and defines its needs. It is important to be noted that in these cases, only the criterion of the most economically advantageous tender is used. After the contract notice and within the relevant deadline, there is a dialogue between the contracting authority and the interested economic operators, in order to clarify the most suitable “modus operandi” for the requirements of the contract.

During this dialogue, the right of equality among the candidates should be ensured and the responsible one for this task is the contracting authority. In other words, the information given to every participant should be the same, in a way that does not affect confidentiality among the

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<sup>95</sup> The construction of a bridge, court or national road

<sup>96</sup> M. Celentani, Juan-Jose Ganuza, *Corruption and competition in procurement*, European Economic Review 46 (2002), 1273-1303

<sup>97</sup> R. Nielsen, *Reforming ethic policies in sectors suffering by corruption*, in: “*The combat of corruption of public officers and employees*”, International Congress, European Commission (Athens, 22-23 October 1999), Publ. Sakkoulas, 2001, 207

<sup>98</sup> For example contracts for medical high-tech products or constructions based on specific supplies, which a few companies may provide.

tenderers. The competitive dialogue is completed only when the contracting authority finds a suitable proposal for the needs of the project.

In the negotiated procedures, we should distinguish two possibilities. In the first one, there is a published contract notice, whereas in the second one there is no obligation to publish the contract notice. In particular, this procedure is exceptional and is usually followed by the contracting authority, when a prior open or restricted procedure has not been successful and there were no candidates who fulfilled the requirements of the contract. It is also very common to have a negotiated procedure without a contract notice, in cases of additional works for example in the public works or public services contracts<sup>99</sup>.

In the above procedures is more likely to find a less “moral” conduct, because in the beginning they lack of transparency. How easily, for example, can a contracting authority be controlled for an urgent need in supplies?<sup>100</sup> In such situations, it is imperative for the contracting authority to follow a negotiated procedure. Moreover, this procedure is the only way to procure special categories of products, such as very important from scientific or technological aspect. In fact, it is inevitable to overcome the risk of corruption in these cases, as the provisions of law allow contracting authorities to use this procedure.

Closing the brief presentation of the different procedures in procurement, it results that no procedure may secure the protection of equality among all candidates and transparency. What should be underlined is that lack of these two basic principles is not only an economical issue, but concerns all the factors involved and the quality of society in general. Furthermore, the consequences in a contract, which has been awarded without the legal process, may be disastrous even for human lives (in case of the health sector). The only solution derives from the “heart” of society, and especially people working in economic operators and contracting authorities, but not only them. Everybody can contribute to a more “moral” procurement system by learning the rules and having the relevant information. Nowadays, there are particular websites, where there are all the ongoing procedures and all people may have access to these<sup>101</sup>. In any case, everyone should feel responsible for these cases and has the right and obligation to declare them to the competent authority.

### **3. INFRINGEMENT PROCEDURE**

#### **3.1. The legal scope**

According to the article 258 TFEU<sup>102</sup>, if the Commission realizes an infringement of European Law or a complaint is reported, it tries to resolve the underlying problem by procedure of a structured dialogue with the Member State. In fact, the Commission requests from the Member State (MS) to provide all information on the possible infringement and if the MS fails to comply with EU law, the Commission may impose financial sanctions, as well.

Greece has participated many times in this procedure and it has been very difficult sometimes to comply with the underlying rules. In particular, there are many cases in the sector of public procurement, but most of them are resolved before the procedure to the Court of Justice, which is

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<sup>99</sup> Articles 31 and 32 of the Directive 2004/18/EC on the coordination of procedures for the award of public works contracts, public supply contracts and public services contracts.

<sup>100</sup> A typical example in Greece is the public procurement in national hospitals.

<sup>101</sup> [www.ted.europa.eu](http://www.ted.europa.eu), [http://ec.europa.eu/growth/single-market/public-procurement/index\\_en.htm](http://ec.europa.eu/growth/single-market/public-procurement/index_en.htm), and there are relevant sites for every member-state.

<sup>102</sup> Treaty on the Functioning of the European Union

the last stage of the infringement procedure. However, the letter of formal notice is followed most of times by the reasoned opinion of the Commission.

From the year 2010 until 2013, in Greece there has been a reduction in the infringement cases, but then in 2014<sup>103</sup> there has been a rise. From the examples presented below, it can be assumed that procurement contracts on supplies and services are more vulnerable than work contracts. In fact, the rules for supplies are applied proportionally to contracts of services and this may cause inconvenience to the proper functioning of procurement.

### **3.2. Cases of infringement procedures**

#### **I) Contract for information system**

A first case of violation of Directive 2004/18/EC refers to the award of contract for ICT by a Greek contracting authority<sup>104</sup>. In 2007, Greek authorities awarded a contract to a company after a public procurement procedure for the development of a national portal, which citizens and companies may use for their dealing with Greek authorities. Thereafter, a new information system should be used by the staff in Centers for citizen's services (KEP), such as providing birth certificates or licences, and a supplementary contract of 1,5 million euros should be awarded in order to develop this information system. The Greek authorities, instead of publishing a contract notice, they awarded the contract to the same company of the national portal, following a negotiated procedure. However, according to the Commission's view, the development of the portal in the first contract has nothing in common with the development of the information system of KEP and as a result, the negotiated procedure should not have been followed by the Greek authorities. On the contrary, a new open tender should have taken place, so that all interested companies are informed and submit a tender. Consequently, the contract has been directly awarded, violating the principles of transparency and equal treatment. As Greece has not corresponded to the formal notice of Commission in 2010, the infringement procedure reached the second stage with a reasoned opinion.

In the above case, we can observe the failure of choosing a negotiated procedure, as the Greek contracting authorities considered the second contract relevant to the first one and gave no publicity to the second procurement procedure. Monitoring this practice, it is difficult to decide how this choice has been made, if it has happened on purpose or was a result of ignorance of the underlying rules. Both explanations underline the lack of control in procurement procedures and at the same time the complexity of relevant rules that should become clearer for their application.

#### **II) Contracts for cadastral mapping and planning services**

Another case in Greece, which has reached the last stage of infringement procedure by referring the violation of procurement rules to the Court of Justice took place in 2009<sup>105</sup>. In particular, the Commission has decided to refer Greece over the direct award of public service contracts for cadastral mapping and planning services of Vassilika, Kassandra, Egnatia and Arethousa. Before that, Greece has failed to comply with European rules even after the reasoned opinion of the Commission.

In the beginning, the municipalities of the above areas awarded directly six public service contracts for cadastral mapping and planning services to one company, but soon afterwards, the object of these contracts had been broadened and as a consequence, their value increased, in some of them

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<sup>103</sup> Staff working document 2014 Annual Report (Part II: Member States)

<sup>104</sup> Case IP/10/1441 of Commission

<sup>105</sup> Case IP/10/1242 of Commission

even 300%. Such an increase in the scope of procurement rules should be considered significant and means a substantial change of the contract. In this case, the contracting authorities should launch an open or restricted procedure. Instead of that, Greek authorities awarded directly the new contracts to the same company.

As a result, all the possibly interested companies were excluded from participating in the tender and this practice directly violates the European procurement rules and has an important impact on the access of SMEs in procurement procedures. So Greece, after the above decision of the Commission, faces financial sanctions that may be converted in public debt, which finally will influence all Greek citizens.

### **III) Contracts in sector of public health**

In the vulnerable sector of public health, we may refer to a case, in which Court of Justice has imposed financial penalties on Greece<sup>106</sup>, as it has breached the rules on public procurement by not respecting the safety standards for medical products during the award of contracts. Since 2003, Commission was informed that several public hospitals in Greece rejected offers from suppliers of medical equipment bearing CE certification marking, which is guarantee that the products fulfill the environmental, health and safety requirements. Products with a CE marking cannot be accepted only in case of suspected forgeries or concerns of public health. Otherwise, the contracting authority should award the relevant contract to companies fulfilling the safety requirements. Moreover, it was found that the technical specifications in the tender notices have been discriminatory, excluding any interested supplier of CE-certified medical products from submitting a tender. As a result, all supply contracts have been awarded by using a procedure that does not comply with the European rules of public procurement and secures the principles of fair competition and transparency.

### **IV) Contracts in software services**

In 2009<sup>107</sup>, the Greek Social Security Foundation (IKA) followed an open procedure for the provision of services for an operating information system. The contracting authority (IKA) set in the necessary requirements for the bidders to have project references for successfully implemented contracts in Greece which has the same profile as the one for the IKA. However, such a condition in a tender leads to a direct discrimination of interested candidates and as a consequence, violates the European rules (Directive 2004/18) for public procurement.

This practice of the Greek contracting authority did not allow to companies of Member-States with similar services to participate in the procedure and minimized unlawfully the competition that should be established in a procurement procedure. The Commission has already started the infringement procedure, by sending to Greece a reasoned opinion, as the public money<sup>108</sup> were not spent in the most effective way and the Greek taxpayers had not the opportunity to get greater value of it awarding the contracts to other companies with less money.

## **4. THE SOCIAL COST OF PUBLIC PROCUREMENT**

What is evident in the presented cases, is that although there is a legal frame in public procurement, there are also important problems in implementation of the rules. These problems derive from people and economic operators involved in the procedures, which appear to be “unlawfully” careless. In fact, people take always their decisions comparing the cost and benefit in every

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<sup>106</sup> Case IP/10/1552 of Commission and relevant Court judgment C-489/06

<sup>108</sup> The value of the contract was almost 7,5 million euros

situation for them and as a result, their conduct may change if the interests are modified. In other words, people correspond to the relevant motives.

However, persons may react to the same motives in a different way. That is why, the conduct cannot be foreseen, even though the economic and legal frame is strictly defined. The sector of public procurement has a prominent place in the economy of a society. Main priority of public procurement rules is to achieve the best value for money and of course this may happen not only by using the criterion of “lowest price”, but also by the “most economically advantageous” tender. The procurement rules may function better if they were developed in a social-centered scheme<sup>109</sup>, where the law is subordinate to the development of society (including the economy), rather than having law and its evolution as primary notion, independent from society. According to this approach, all changes in law depend usually on what happens in a society, including the economy. So the social aspect of award a contract should be neglected.

In particular, there are five main principles in procurement procedures that should be respected, such as non-discrimination on grounds of nationality, transparency, equal treatment of candidates, proportionality and free movement of goods, services and workers. Based on these principles, the tender notices issued by the contracting authorities should ensure the minimum standards for a fair competition. The search for best value for money in procurement demands a balanced combination between quality and cost for the contracting authority. Every contract should adjust the requirements of the tendering service or product and establish a minimum quality standard.

This social aspect of procurement is usually referred as “social added value” that the contracting authorities should include in every procedure. A typical example could be the sustainable procurement procedures in cases of urban regeneration projects. The contracting authority should spend time for planning the tender notice, in order to serve a society for many years and provide environmental protection and economic efficiency at the same time. Thanks to this approach, many social, economic and environmental objectives can be fulfilled, but firstly the public sector authorities should be organized. A solution would be the better cooperation in public sector, which may raise the standards and maximize the efficiency of the contracts. The European procurement Directives are the guidelines for the proper award of contracts, but every Member State, may encode in national laws the “temper” of every given society, which inevitably influences the procurement procedures.

It would be also helpful the national laws to give motives to the contracting authorities, if they choose economic operators which can correspond better to the needs of sustainability described above. In fact, many small and medium size companies or social enterprises do not even have the opportunity to take part in procurement procedures, because they are not usually informed about the ongoing tenders or they believe that larger and more experienced companies will be chosen and their offer will against all odds. This practice, though, undermines the innovation that is necessary to the evolution of a society and prevents certain economic operators from having access in internal market.

Furthermore, during the selection phase, the contracting authority is obliged to conduct transparently and fairly without any suspected discriminatory practice. If the requirements are defined clearly in the tender notice, then the candidates can submit a legitimate offer and the contracting authority is limited to exclude potential suppliers only for specific reasons, such as criminal offence related to the company’s activities.

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<sup>109</sup> Swedberg R., *The case for an economic sociology of law*, Theory and Society 32: 1-37, 2003

It is, also, very important the correct performance of the contract after its award. In other words, the contract is not completed by the award, but the contracting authority should have a permanent cooperation with the selected company, so that the procurement may contribute to the social objectives.

## 5. CONCLUSION

This presentation attempts to outline the hidden relation between public procurement and society and the embracing of economy in society. Procurement procedures are vital for the evolution of a society and as a consequence, they should function in the most effective way. It is remarkable, though, that there is a detailed legal frame for this sector, but its implementation is insufficient. Besides, one of the main targets of Europe 2020 strategy is to invest in sustainable growth and activate private financial resources. A branch of this strategy could definitely be public procurement of Research and Development (R&D) products or pre-commercial procurement<sup>110</sup>. This whole background is more ready than ever to adopt social policy during all the phases of public procurement.

As global population is increasing and consumption rates are growing rapidly, the resources should be preserved and the idea of sustainable and “greener” procurement procedures seems very promising. Within these terms, all players will benefit from the procedures and in particular, the public authorities will be able to promote social, economic and environmental well-being, and at the same time all the citizens will be ensured that public money are invested in long-term projects. As a result, the trust of people to government policies is restored and the society is more aware of the benefits of the sustainable procurement procedures. In this struggle, there are several barriers that should be overcome and the most important of them are the organization and cooperation among the public procurement operators. Greece has made a great progress in this sector by the establishment of the Hellenic Public Procurement Agency in 2011 and the creation of electronic registers for the monitoring of public procurement procedures. However, it is necessary all the contracting authorities to have the required training in order to be informed and capable of elaborating the stages of every given procedure. Finally, the presence of human is inevitable in all economic phenomena, such as public procurement and it should be taken into consideration from the very first time of planning the relevant strategies.

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## MANAGING COOPERATION PROGRAMS BETWEEN SERBIA AND CHINA IN THE FIELD OF HIGHER EDUCATION

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### ABSTRACT

*For many decades Serbia and China have had a very friendly and supporting relationship filled with most importantly good political and cultural relations. The changes on Chinese domestic market, and global international changes in relations between Serbia and China have also been very positive.*

*Strategic partnership agreement that China signed with Serbia in 2009 was the turning point in their relations. Economic cooperation started to boom and today China is investing heavily in Serbian infrastructure, and is also supporting some other projects regarding education, technology and culture.*

*The aim of this paper is to describe the development of all relations between Serbia and China, to explain current situation, and to specially analyze cooperation programs that we have had in recent years. The focus will be on education, higher education in particular, and the cooperation between the two countries.*

*As a special case study the authors of this paper will present the work results of Chinese Center as a part of John Naisbitt University. The Chinese Center will be used as an example to shown which cooperation programs this unit is conducting, and in what ways they are managed.*

**Keywords:** *management, cooperation, higher education, Serbia, China, Chinese Center, John Naisbitt University*

### 1. INTRODUCTION

From 2009 the overall relations between Serbia and China became more important and intense. This is the year when the Governments of the two countries signed an agreement to become each other's strategic partners. At that time, Serbia was the fifth country with which China signed strategic partnership agreement – together with Russia, Brazil, USA and South Africa. After that year the process of mutual cooperation went on rapidly in a good direction.

Although this strategic partnership was mainly in the field of economy and politics, it also had notes about cooperation in the fields of culture, education and technology.

The aim of this paper is to show how this cooperation started, what the initiatives were at the beginning and what they are now. It will focus on the start of the cooperation process, the development and the results at this moment, especially regarding education.

The first part of this paper will be dedicated to the explanation of the cooperation of these two countries in the field of economy and politics. The second part of the paper is about the cooperation in the field of education, more specifically higher education. The final part will show how this cooperation programs are managed at John Naisbitt University, within the Chinese Center.

Since China is heavily investing in Serbian education, the authors of this paper thought that it was very important to stress out the outcome of this process of mutual cooperation in the field of higher education, and to explain how good relations in this area can benefit in all the aspects of joint collaboration.

## **2. ECONOMIC AND POLITICAL COOPERATION BETWEEN SERBIA AND CHINA**

Relations between Peoples Republic of China and former Socialist Federal Republic of Yugoslavia (whose part was Serbia) started in 1949, and at that time Yugoslavia recognized China as a sovereign country. Still, it was only a few years later - in 1955 that the official collaboration was established. The two countries exchanged diplomatic notes in that year, between two Foreign Ministers, and good relations have continued for many decades, until the disintegration of Yugoslavia.

After that period, The Republic of Serbia, as a sovereign country, established good relations with China, and especially in political sense these good relations were confirmed throughout Chinese intentions to have Taiwan under its sovereignty, and Serbia supported the efforts. On the other hand, China supported Serbia in its efforts to have Kosovo as an integral part of its country, and even to this day China did not recognize Kosovo as a sovereign country. Also, Chinese Embassy in Serbia was bombed in 1999, and three people were killed. Serbian people never forgot that, nor has this tragic event ruined the mutual cooperation.

Although Serbia had very good relations with China in different parts of its historical development, it can be said that after the year 2000 it started to progress, first of all with the mutual visits of high ranked country officials, and then with diplomatic statements that supported previous negotiations. Then in 2009 there was obvious evidence that both countries realized that they could improve their relations, and they signed strategic partnership agreement. This agreement was signed by Presidents at that time - Hu and Tadić, and the agreement states the following (1):

1. both countries defined their political connections and cooperation – especially the issues regarding Taiwan and Kosovo;
2. they also made agreement regarding economic and trading relations, and gave support to deepen the collaboration in the field of building infrastructural projects (such as bridges, power plants, roads), fields of communication, petrochemical industry, high technology, industrial production and food industry;

3. China and Serbia will support and focus even more on deepening the cooperation in the field of culture, education, science and technology, police and military activity, and finally they will establish the collaboration in the field of tourism, civil aviation, health care and entertainment.

During his visit to China, Serbian President Tadić made an agreement with Chinese Government to start new relations by building a bridge on the river Danube together. That bridge "Mihajlo Pupin" was finally finished in 2014, and officially put in use on December 18<sup>th</sup> 2014, during the 16+1 Summit in Belgrade. The bridge was built by China Road and Bridge Company with the help of domestic companies, and its total value together with all the connecting roads amounted \$260 million. Chinese Exim Bank financed this bridge by 85%, and the rest of it was funded by the Republic of Serbia and the city of Belgrade. (2)

That year and the agreement marked the first major step in the joint efforts to pursue better connections between these two countries and it demonstrated Chinese decision to promote Serbia as its main strategic partner in Central and Eastern Europe.

### ***2.1 Economic data***

Peoples Republic of China has been the most important foreign trade and financial partner of Serbia in the East Asia region (3). In the 2014 report of Serbian Chamber of Commerce, out of 165 countries to which Serbia exports its goods, PRC is on 50<sup>th</sup> place.<sup>111</sup> On the other hand, PRC is the 4<sup>th</sup> country from which Serbia imports goods (after Italy, Germany and Russia), out of 202 countries. In aggregate export of Serbia, China participated with 0.1%, and in aggregate import with 8.3%.

The first graph shows the trade exchange between Serbia and China in millions of US \$, starting from 2006 to the 2013 (red shows Serbian export to China, while green is Chinese export to Serbia, and purple is balance in millions of US \$).

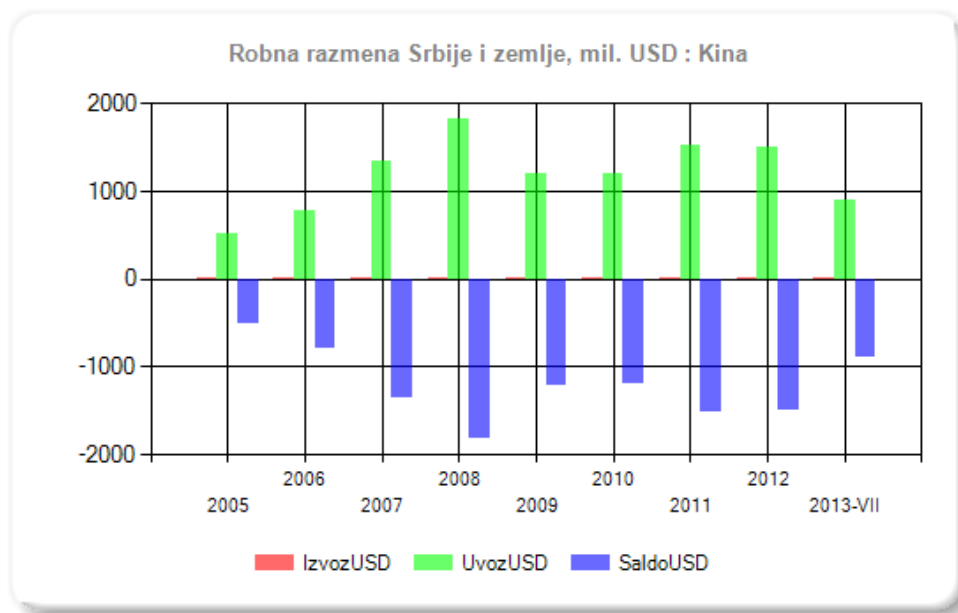
The latest data also shows us that Serbia improved its export to China in 2014 compared to 2013. In 2014 Serbian export was \$ 14.4 million compared to \$9.2 million in 2013. At the same time Chinese export to Serbia also increased – it was \$1.7 billion in 2014 and \$1.6 billion in 2013.

Statistic models that Serbia uses to calculate the import from PRC by taking into account all the goods that are produced in China, nevertheless are this real Chinese goods produced by Chinese companies, or produced by different types of MNC not originally from China. If we take into account only goods that are originally produced and exported by PRC, the export value is significantly lower, approximately 50% smaller.

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<sup>111</sup> Note: All the data in this 2.1 chapter will be given according to the data that can be found on the web site of Serbian Chamber of Commerce,  
<http://www.pks.rs/MSaradnja.aspx?id=73&p=1&pp=2&>

Graph 1- Trade exchange between Serbia and China in millions of US \$



Source: <http://www.pks.rs/MSaradnja.aspx?id=73&p=1&pp=2&>

Graph 2 shows the data on the coverage of import by export is (net export index). The numbers suggest that the situation is currently improving, having in mind that in 2014, 0.64% import was covered by export, and in 2011 for example it was only 0.19%.

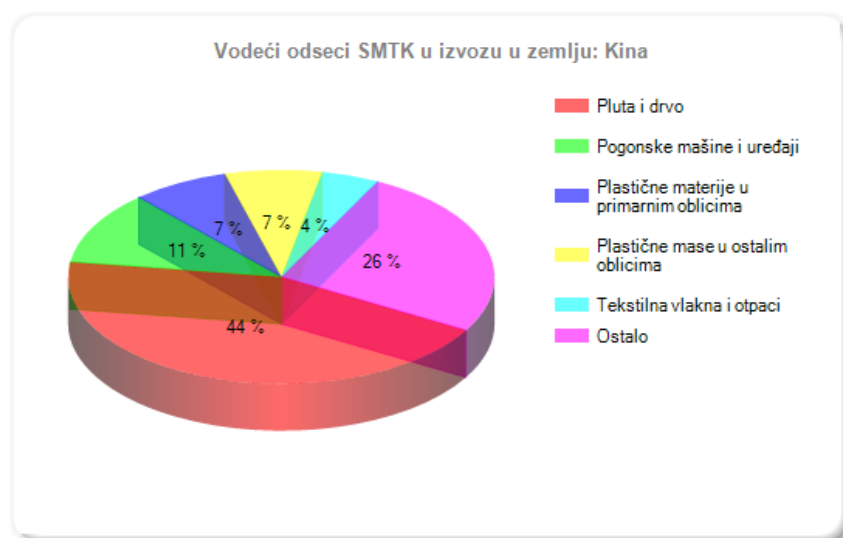
Graph 2- Net export index: Serbia and China



Source: <http://www.pks.rs/MSaradnja.aspx?id=73&p=1&pp=2&>

Graph three points out the main group of products that Serbia exports to China: cork and wood account for 44%, all sorts of different finished products 26%, machines and transportation vehicles 11%, plastic materials 7% while textile accounts for 4%.

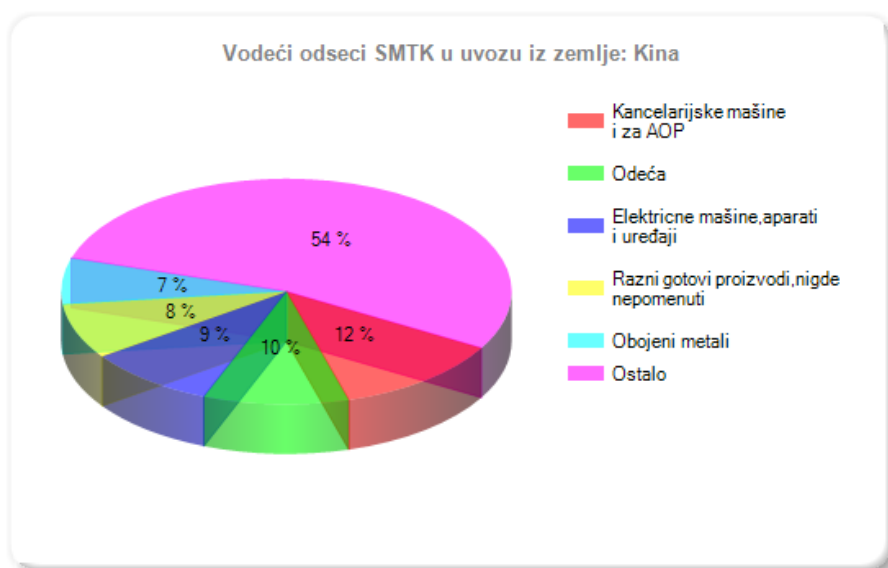
Graph 3 - Main groups of goods by Standard International Trade Classification (SITC) - in the share of exports in country: China



Source: <http://www.pks.rs/MSaradnja.aspx?id=73&p=1&pp=2&>

Graph 4 shows a list of products (in percentage) that Serbia imports from China: 12% office supplies and devices, 10% clothes, 9% electrical machines and devices, 7% non-ferrous metals.

Graph 4 - Main groups of goods (SITC) - in the share of import from country: China



Source: <http://www.pks.rs/MSaradnja.aspx?id=73&p=1&pp=2&>

Summarizing all the above mentioned we can conclude that Serbia has a large trade deficit with China, which can be expected, having in mind the gap in the size of the countries, population, GDP etc. Serbia still exports the goods that have a low degree of processing to China and it still has not found the goods that can satisfy some market niches in China with goods that have a high level of processing and a good market price for Chinese customers.

On the other hand, China exports the goods with higher level of processing, and even if we exclude the goods that Serbia imports from China coming from foreign MNC, still there are a lot of products that are made in China by Chinese companies, which make a lot of profit from Serbian customers, mainly in the field of computers, mobile phones, furniture and textile.

## ***2.2 Serbia as an integral part of Chinese economic initiatives – Summit 16+1 and New Silk Road***

So far, Serbia and China have had six years of constant and prosperous relations. Serbia has been a supportive partner of China on both international initiatives that China is promoting right now - New Silk Road and Summit 16+1.

One Belt – One Road (so called New Silk Road) initiative is a project to better connect China with countries in Europe, Asia and Africa by building roads, railways, infrastructure such as ports that can save the time needed for transportation of goods, and thus help lower the transportation costs.

Summit 16+1 under which China is making plans with 16 countries from Central and Eastern Europe tends to improve the relations not only in the field of economy, but also in the field of infrastructure, tourism, technology, culture and education. In a sense this summit is a smaller version of One Belt – One Road initiative, with more versatile program. The New Silk Road initiative is mainly focused on road and railroad infrastructure, while 16+1 is more broadly oriented.

Serbia is particularly interested in the 16+1 Summit, and this is the reason why Serbia was the host of the annual meeting of Prime Ministers from Central and Eastern Europe and China in 2014.

At this meeting, Serbia signed 13 agreements and memorandums with China. (4) The agreements included the following:

1. Economic and technical cooperation,
2. Air traffic
3. Approving the loan for the second stage of the thermal plant in Kostolac B project,
4. Opening cultural centers in the other country,
5. Building high speed railway between Serbia and Hungary.

Memorandums were signed for:

1. Financial cooperation between these countries;
2. Starting a feasibility study on the construction of an industrial park;

3. Cooperation on a project referring to a part of the ring road around Belgrade, Bubanj potok and Vinča;
4. Financing infrastructural projects in Serbia;
5. Protocol on health standards for exporting Serbian meat to China.

So this Summit had excellent results regarding the agreements, and after that some projects such as building the high-speed railway and building the Kostolac B thermal plant have started. Various meetings in both countries regarding the beginning of other projects (e.g. industrial parks and steel factory Železara Smederevo) and their funding have been held.<sup>112</sup>

At a business conference that was held in January 2016 at Serbian Chamber of Commerce, state officials said that right now the value of the current and future projects with Chinese investments amounts €3.5 billion. (5) Most of this money goes to transportation, infrastructure and energetics.

In February 2016 (6), Chinese President Xi Jinping gave an official statement in which he particularly pointed out the intensified cooperation between China and Serbia in recent years, and that countries were deepening strategic relations in line with the mutual fundamental interests. Xi also said that he: "observes that the strategic partnership between the Peoples Republic of China and the Republic of Serbia is continuously deepening and cooperation expanding in all areas." Also, Chinese officials confirmed that Xi's accepted the invitation from Serbian President to visit Belgrade in 2016, and that is usually a sign for improving bilateral relations even more.

### **3. COOPERATION IN THE FIELD OF PRIMARY AND HIGHER EDUCATION**

One part of strategic partnership agreement between Serbia and China had references to the cooperation in the field of education. That part of partnership together with building the bridge over the river Danube was carried out very quickly. In August the agreement for partnership was signed and only five months later the first agreement regarding education was signed in Beijing by current Ministers of education. (7) That document shows that the two countries encouraged cooperation on the level of high schools, but most importantly on the level of graduate schools and universities. Also, special attention was dedicated to improvement of the work of Confucius Institute in Belgrade, improvement of studies of Serbian language at Beijing Foreign Studies University and there were talks about the increase in number of scholarships for Serbian students in China.

The turning point in this cooperation was the year 2011 in which Serbian Ministry of Education together Chinese Ministry of Education started a pilot project for learning Chinese language in

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<sup>112</sup> Note: Thanks to these projects, several important companies from China such as: ZTE, Huawei, China Road and Bridge Company, Sinohydro, Shandong high speed company, CMEC – hydro plants, China International Water and Electric Corporation, Belmax are currently operating in Serbia– whole sale of Chinese products and China Development Bank.



Serbian primary and high schools. Chinese government together with Hanban<sup>113</sup> sponsored Chinese language teachers to come to Serbia, and teach Serbian pupils Chinese language. The cost of their stay in Serbia – accommodation, health insurance and transportation were paid by Serbia and all other costs were paid by Hanban.

There are about 70 primary schools, high schools and professional high schools (such as Philological gymnasium, Gymnasium in Sremski Karlovci and Mathematical gymnasium) where pupils learn Chinese language. Cities like Niš, Leskovac, Beograd, Užice, Knjaževac, Rača, Podgorac, Novi Sad, Nova Varoš, Vlasotince, Knjaževac, Sokobanja, Boljevac, Lebane, Smederevska Palanka, Paraćin, Despotovac, Rgotina, Medveđa and some smaller towns that have already started Chinese language courses. According to the reports in Serbian newspapers, approximately 2,500 Serbian pupils attended those classes last year.

The situation is also improving rapidly at university level. There are more and more universities that offer Chinese language courses. In Serbia there are two Confucius Institutes- one in Belgrade and one in Novi Sad. Two private universities in Serbia have Chinese language courses that are integrated in school official programs, including John Naisbitt University. They also offer other types of Chinese language courses that are open to both students and public.

Chinese Ministry of Education gave 67 scholarships to students from 2009 to 2015. These scholarships are diverse, so students can apply either for scholarships to improve their knowledge of Chinese language, or master's or PhD studies. Students can attend master's or PhD studies in Chinese or in English language-whichever they prefer. These scholarships cover full tuition fees, books, health insurance and monthly wages for students. This means that China spends approximately between €10,000 and 20,000 for master's or PhD studies that last for minimum two or four years, on one student, depending on the type of scholarship, university that they attend and the number of the years that students stay in China. The students only pay for international airplane ticket, and expenses that they have for applying for scholarship such as medical examination that is issued by national health organization, validation of student's diploma (e.g. transcript in English language) and sometimes visa expenses.

Last year Chinese Ministry of Commerce (MOFCOM) started giving the scholarships for the same type of university programs that Ministry of education does, but these scholarships are even more expensive, and they allow students under the age of 45 to apply, while the previous one was restricted to students under the age of 30.

Unfortunately, at this moment we cannot determine the exact number of Serbian students that were or are currently studying in China, because we don't know how many of them won the scholarships

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<sup>113</sup> Hanban is a colloquial abbreviation for the Chinese National Office for Teaching Chinese as a Foreign Language. It is governed by the Office of Chinese Language Council International affiliated with the Chinese Ministry of Education. In general, Hanban is responsible for spreading knowledge and interest for the Chinese language and culture in nations around the world that are not native speakers of Chinese.

from some Chinese universities. We can only see on some Universities web sites or in some newspapers that there are such students, so we suppose that the number is even bigger.

There are about 10 professors who received this kind of scholarships (starting from 2009) through the Ministry of Education. But this is not the only way that professors can apply for them. They can apply for different kind of specialist courses that aim to help improve scientific and academics knowledge about some parts of Chinese culture, history, tradition, economy, technology, engineering... Such courses are organized by Chinese Ministry of Commerce or Chinese Ministry of Culture. Each year they give several scholarships, so the number of professors that have been to China is certainly much bigger.

One of the goals of strategic partnership agreement between Serbia and China is to improve the mobility of students and professors among these two countries. It means that in the future there will be more agreements between Chinese and Serbian Universities that will guarantee more exchange programs among these countries.

In the field of higher education Serbia has already established joint research projects that were co-funded by Serbia and China, for the period between 1<sup>st</sup> July 2013 and 1<sup>st</sup> July 2015. (8) Next public call for projects was announced in the third quarter of 2014 (for the co-financing scientific and technological cooperation) for the period between 2015 and 2016.<sup>114</sup>

In December 2015 our Government signed 13 new memorandums with Chinese Government in Beijing, and among them there was one about the cooperation between Serbian Ministry of Science and Technology and Chinese Ministry of Education. This memo is about scientific cooperation in the field of joint review (Serbian and Chinese) of scientific projects that Serbian scientist will apply for grants for the next cycle of Serbian national scientific project round.

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<sup>114</sup> Ministry of Science and Technological Development of Republic of Serbia official call: "The subject of the competition is co-financing the mutual visits of researchers (the cost of travel and accommodation) to be implemented within the project activities of bilateral scientific and technological cooperation. The competition is reported to researchers and teams of researchers who are employed in scientific research organizations that are eligible in accordance with the Law on Scientific Research. Preference is given to proposals of bilateral projects which are based on scientific research projects funded by the Ministry of Science and Technological Development of Republic of Serbia, which are in line with the Strategy of Scientific and Technological Development of Republic of Serbia from 2010 to 2015, or which are funded by international source (e.g. the Horizon 2020 program and other international and regional organizations) and project developers have not participated in the previous project cycles with the People's Republic of China."

#### **4. CASE STUDY: CHINESE CENTER AT JOHN NAISBITT UNIVERSITY**

Chinese Center as part of "John Naisbitt" University was established in October 2012 in cooperation with Chinese Embassy in Republic of Serbia. The purpose of establishing the Chinese Center was and still is the improvement of academic, cultural and political-economic cooperation between two countries that have had strong friendship for many decades.

Chinese Center, as an integral part of John Naisbitt University which follows modern business trends, has a clearly defined mission, vision and goals:

##### **MISSION**

To improve the cooperation between Serbia and China through its work, especially in academic and business areas, by informing and educating all who show interest in studying about China and Serbia.

##### **VISION**

The principal vision of the Chinese Centre is to become a recognizable brand in Serbian market, and in the future on Chinese market as well, and to cooperate with all those who are interested in the improvement of cooperation between Serbia and China to their mutual benefit.

##### **GOALS**

The major goals of the Chinese Center are the following:

1. Promotion of Chinese culture, history, tradition and language
2. Promotion of Serbian culture, history, tradition and language
3. Improvement of the cooperation between "John Naisbitt" University and Chinese universities and strengthening academic cooperation
4. Enhancement of Chinese-Serbian relations in all social fields.

The first activity of CC was organizing Chinese language courses. Professors from both Serbia and China were teaching students at Chinese Center. More than 500 students were and are still attending different courses of Chinese language (from beginners to advanced level). In addition to the knowledge of the Chinese language, they have also gained the knowledge about Chinese culture, history and tradition. The course is open not only to university students, but to all citizens of Belgrade. The students are required to be older than 19.

With the help of Chinese Embassy in Serbia CC established a library that is fully equipped with books necessary to learn Chinese language from beginners to advanced level.

A month ago CC launched a new web site in order to provide information primarily to interested students, but also to promote different aspects of China. ([10http://chinesecenter.nezbit.edu.rs/](http://chinesecenter.nezbit.edu.rs/)) Full media coverage of all the things that the Chinese Center does is available on the web site, and there is a blog where they write university students about their experience studying in China or Serbia.

Those are the students who have obtained different scholarships from Chinese Embassy here in Serbia or from Chinese universities.

CC also organizes different types of courses such as: Chinese Economy and Management Practice (Doing business in China). In order to promote the cooperation between these two countries Chinese Center organized different manifestations such as:

- First Chinese higher education fair in Serbia in 2013. During that fair 13 universities from China presented the programs of their bachelor, master's and PhD studies to the interested students from Serbia (<http://chinesecenter.nezbit.edu.rs/2016/03/na-megatrendu-odrzan-prvi-sajam-kineskog-visokog-obrazovanja-u-srbiji/>);
- Celebrations of Spring Festival (2014, 2015 and 2016), with the participation of students, but also with guests from different primary schools, famous Serbian artists and Wing Chun performance. Also, his Excellency Mr. Li Manchang attended this year celebration, and spoke about Chinese Center, and its work not only with Serbian, but with Chinese students as well;
- CC founded Sinology club and organized round table conference "Challenges of Sinology in Serbia" (11)
- CC organized lectures to eminent scientist and experts coming from China at JN University.

Besides this, one of the main goals of CC was specialization of professors and students in China. Up until now three professors have obtained the scholarships for specialist studies in China. As for students, 13 of them went to study in China – half or full year of studying Chinese language, summer schools or master's studies. Currently, 4 students are studying in China, three of them are on their master's studies and one student is learning Chinese language for one year.

This year Chinese Center is a place where nine Chinese students are learning Serbian language, about Serbian culture, history tradition, economy, business practices here, and our relations with China. These students are from Hebei University of Foreign Studies, and they will be volunteers at the next Summit 16+1 this year in China. Some of the courses that they have are in Chinese and some of them are in English.

In the end, it is important to point out that although John Naisbitt University does not have a faculty of philology, it included Chinese language as one of the languages that can be studied at the Faculty of Culture and Media and Faculty of International Economics, so it means that the students can study Chinese language at their faculty and get grades in their student notebooks (index).

Managing different kind of programs and initiatives involves careful planning and decision making. CC has a lot of contacts among Serbian academic, politic and economic professionals and a lot of people from Chinese Embassy, Chinese Universities and Chinese business people. They are all very interested in making progress and starting new projects. This implies consideration of many elements to see if these initiatives are something that CC can manage and in what way. So the priorities are determined on annual basis and if there is a need revised on half-year level. So having in mind that CC has just celebrated its third year of work, it can be said that in the previous

years the results were good, but they should be even better in upcoming years, because Chinese people value long term cooperation.

## **5. CONCLUSION**

Cooperation projects in the field of higher education between Serbia and China have never been so successful and so rapid. Each and every day there are new initiatives and new ideas. There is willingness from both Governments to improve all bilateral relations and education is one among them.

Because of that we have many chances as a country to use the opportunities in the field of education, and especially in the field of higher education. This is very significant for Serbian higher education system, since our total budget for education is about less than 4% of GDP, and for higher education less than 1% (data from 2013), which means that we do need help.

By giving Serbia so much support in the field of education, China is helping our country to lessen the extent to which our tough economic situation affects the scientific work. First of all Serbian students are given the opportunity to study abroad, to improve their knowledge of at least two languages (Chinese and English), they have a chance to study at best Chinese universities and they have the opportunity to connect with professors and students all over the world and explore international scientific work and relations. On the other hand, Serbian professors and scientist can expand their scientific network, improve their scientific work and not only help themselves but also theirs university to become even more important on international scientific level.

What is also very important is managing this kind cooperation in the best possible way. Serbia as a country has had so many political and economic difficulties in past 20 years, and education suffered because of that quite a lot. So when we have such opportunities to improve our education system at all levels, we need to utilize this privilege in every possible way and use them wisely. Promotion and selection of the candidates that will represent our country on every level must be careful and their work needs to provide good results. Otherwise these chances that we had and still have will be useless.

Since Serbia has historically been more connected with Europe and we have more scientific work and cooperation with those countries, this is a very good moment to broaden our research about Asia, and especially China. Projects like Summit 16+1 and New Silk Road will give us a chance to explore Asia more closely as a region with which we can have more close relations in every sense.

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## ANALYZING THE DEUTSCHE BANK CAPITAL INCREASE: THE CASE OF 2014. AND 2010

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### ABSTRACT

*In this paper, we ask whether the Deutsche bank, prior to the European Central Bank Governing Council decision at its meeting on 5 June 2014 on a combination of measures to provide additional monetary policy accommodation and to support lending to the real economy, reacted systematically to stock price movements. The results are extremely robust to alternative model specifications. The evidence is inconsistent with the hypothesis of a systematic reaction of the Deutsche Bank to its capital increase. However, we do find that the Deutsche bank may have reacted accordingly reaffirming its commitment to Strategy 2015+ and is providing updated financial aspirations and further details of an accelerated growth strategy.*

**Keywords:** *Deutsche Bank, Monetary Policy, Stock Prices, Reaction Function*

### 1. INTRODUCTION

The global economy is in the growth momentum since the first quarter of 2014. Meanwhile, geopolitical tensions in Europe have raised concerns about the future of economy if tensions escalate. Still, global inflation remains low reflecting muted energy price developments. European central bank is on fast highway of creating "Banking Union of Europe" despite the fact that the big banks will stay big with too much power and influence. Banks in Germany appeared to be interconnected with the process of creating "Banking Union of Europe" and again everything lead back to the biggest one, the Deutsche Bank which had and will have a central position in the German company network. Now, the old myth of the Deutsche Bank is damaged due the years of financial crisis, due to mismanagement etc. Every now and then the Deutsche Bank had significant capital increases, and every time it happened the share price was tumbling. And shareholders were tumbling as well! Hence presenting the following calculation method of the Deutsche Bank share price its banking business is back on the beginning. Not in founding years, in 1870. for sure but some period later on. In 2014. the Deutsche Bank sold out many non-core and profit loss businesses, but all this was not enough while European central bank wants 130 strongest banks in EU. What we mean by the strongest banks are well capitalized and healthy banks. The ratios for capitalization are higher and higher, so the small banks are sold out or were shut down in process of bankruptcy. However, it is a priori clear that Government in Germany do not want, or do not have enough money in terms of billions of Euros, to support the Deutsche bank. So the only way out, way to stay the number one in Germany is to seek fresh capital on the market, under market conditions. This could lead to changes in ownership structure in the Deutsch Bank. Studies by La Porta et al. (1999) as well as Franks and Mayer (2001) and Faccio and Lang (2001) described that ownership structure in Germany differs from that in other developed countries, in particular because financial institutions are more often the controlling shareholder<sup>1</sup>.

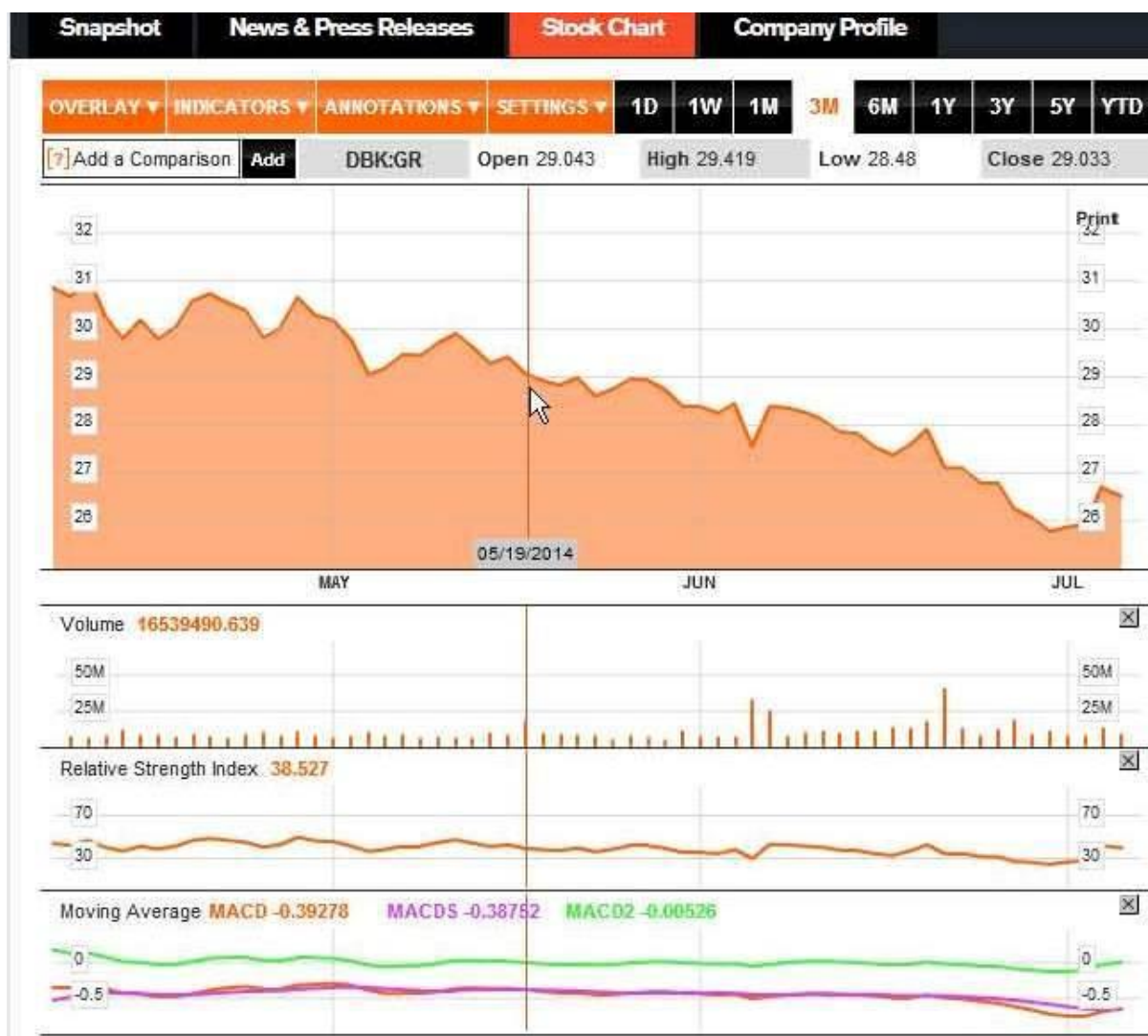
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<sup>1</sup> Already Schneider-Lenné (1992, pp. 13–14), which had been the first female Managing Board Member of

## 2. CAPITAL INCREASE ANALYZING IN 2014.

On May 18, 2014 Deutsche Bank (XETRA: DBKGn.DE / NYSE: DB) announced a capital increase with proceeds expected to be approximately EUR 8 billion. The capital increase will include an ex-rights issue of EUR 1.75 billion which has already been placed with an anchor investor and a fully underwritten rights issue. Additionally, Deutsche Bank reaffirmed its commitment to Strategy 2015+ and is providing updated financial aspirations and further details of an accelerated growth strategy. The rights issue is expected to raise EUR 6.3 billion of new equity<sup>2</sup>.

**Figure 1:** Share price on May 19, 2014



Deutsche Bank, describes the differences in shareholder structure between Germany and the United Kingdom.

<sup>2</sup> [https://www.db.com/ir/en/download/IR-Release\\_2014\\_05\\_18.pdf](https://www.db.com/ir/en/download/IR-Release_2014_05_18.pdf) (06.07.2014.)



**Source:** <http://www.bloomberg.com/quote/DBK:GR/chart> (06.07.2014)

The capital measures will increase the Common Equity Tier 1 (CET1) ratio by approximately 230 basis points from 9.5% at the end of the first quarter 2014 to 11.8% on a pro forma CRD4 fully-loaded basis. This increase follows significant strengthening of this ratio, which stood below 6% in mid 2012, under Strategy 2015+. These measures will substantially increase the Bank's capital ratio, provide a buffer for future regulatory requirements, and support targeted business growth. Deutsche Bank placed approximately 60 million shares at a price of EUR 29.20 per share with Paramount Holdings Services Ltd., an investment vehicle owned and controlled by His Excellency Sheikh Hamad Bin Jassim Bin Jabor Al-Thani of Qatar, who intends to remain an anchor investor in Deutsche Bank. Additionally, through the rights issue, Deutsche Bank expects to issue up to 300 million new shares. The rights offering will be led by Deutsche Bank as global coordinator and book runner. A syndicate of banks have agreed to a firm underwriting of the new shares. Subject to the approval by the BaFin (Federal Financial Supervisory Authority in Germany, [http://www.bafin.de/EN/Homepage/homepage\\_node.html](http://www.bafin.de/EN/Homepage/homepage_node.html)), a securities prospectus was published on 5 June 2014. The subscription period finished on 24 June 2014<sup>3</sup>.

**Figure 2:** Share price on June 25, 2014



<sup>3</sup> [https://www.db.com/ir/en/download/IR-Release\\_2014\\_05\\_18.pdf](https://www.db.com/ir/en/download/IR-Release_2014_05_18.pdf) (06.07.2014.)

**Source:** <http://www.bloomberg.com/quote/DBK:GR/chart> (06.07.2014)

The risks surrounding the economic outlook for the euro area continue to be on the downside. Geopolitical risks, as well as developments in emerging market economies and global financial markets, may have the potential to affect economic conditions negatively. Other downside risks include weaker than expected domestic demand and insufficient implementation of structural reforms in euro area countries, as well as weaker export growth. As a diversified financial services firm, founded in 1870, Deutsche Bank's operations span both investment banking and retail banking. Since over half of its profits come from investment banking, however, it's most often compared to other I-banks such as Goldman Sachs Group (GS), Morgan Stanley (MS), and Merrill Lynch (MER). As Deutsche Bank pares down its retail operations to focus on higher-margin investment banking segments, this comparison will continue to become more appropriate<sup>4</sup>.

**Table 1:** Analyzing share price between May 18, 2014 and June 25, 2014

	18.05.2014	25.06.2014	Change in %
Share price in € (close)	29.033	26.725	-8.64
Share price in € (low)	28.48	26.32	-8.21
Share price in € (high)	29.419	26.94	-9.2
Volume in millions	16539490	10569199	-56.49
Relative Strength Index	38.527	30.705	-25.47
MACD	-0.39278	-0.57915	-67.82
MACDS	-0.38752	-0.5177	-74.85
MACD2	-0.00526	-0.06145	-8.56

**Source:** Calculation of Author (06.07.2014)

The rising volatility of asset prices, such as stock prices, seems to have been associated with a diminution of volatility in business cycle movements. However, the stock price-interest rate relationship involves endogenous variables. Moreover, conventional methods, such as instrumental variables approaches, are unable to satisfactorily correct the endogeneity problem because of the near non-existence of instruments highly correlated with asset prices but uncorrelated with interest rate movements<sup>5</sup>.

A share price is the price of a single share of a number of saleable stocks of a company, derivative or other financial asset. The stock price or the value of a company is the present value of its future cash flows. The higher the cash flows (revenues, collection of accounts receivables, etc) the higher

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<sup>4</sup> [http://www.wikininvest.com/stock/Deutsche\\_Bank\\_AG\\_%28DB%29](http://www.wikininvest.com/stock/Deutsche_Bank_AG_%28DB%29) (06.07.2014.)

<sup>5</sup> There are strong theoretical reasons to link stock prices and interest rates or inflation. Space constraints prevent a full discussion. See, Sellin (2001) for a survey.

the stock price. From Table 1. we can conclude that the closing share price of Deutsche Bank has decreased by 8.64% after a capital increase.

In capital markets, volume, or trading volume, is the amount of a security (or a given set of securities, or an entire market) that were traded during a given period of time. In the context of a single stock trading on a stock exchange, the volume is commonly reported as the number of shares that changed hands during a given day. Trading volume is usually higher when the price of a security is changing. News about a company's financial status, products, or plans, whether positive or negative, will usually result in a temporary increase in the trade volume of its stock. Higher volume for a stock is an indicator of higher liquidity in the market. For institutional investors who wish to sell a large number of shares of a certain stock, lower liquidity will force them to sell the stock slowly over a longer period of time, to avoid losses due to slippage<sup>6</sup>. From Table 1. we can conclude that the volume of Deutsche Bank share has decreased by 56.49% after a capital increase.

The relative strength index (RSI) is a technical indicator used in the analysis of financial markets. It is intended to chart the current and historical strength or weakness of a stock or market based on the closing prices of a recent trading period. The indicator should not be confused with relative strength. The relative strength index was developed by J. Welles Wilder and published in a 1978 book, *New Concepts in Technical Trading Systems*, and in *Commodities* magazine (now *Futures* magazine) in the June 1978 issue<sup>7</sup>. It has become one of the most popular oscillator indices<sup>8</sup>. From Table 1. we can conclude that the RSI of Deutsche Bank share has decreased by 25.47% after a capital increase.

MACD, short for moving average convergence/divergence, is a trading indicator used in technical analysis of stock prices, created by Gerald Appel in the late 1970s. It is supposed to reveal changes in the strength, direction, momentum, and duration of a trend in a stock's price<sup>9</sup>. From Table 1. we can conclude that the MACD indicator of Deutsche Bank share has decreased by 67.82% after a capital increase, MACDS has decreased by 74.85% and MACD2 has decreased by 8.56%.

This figures modify Rigobon and Sack's (2003) testing strategy in a way that we can use different methods to identify volatility regimes<sup>10</sup>. We also consider the possibility that the Deutsche bank may have reacted instead to deviations from average or trend returns driven by 'fundamentals'. I

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<sup>6</sup> Baiynd, Anne-Marie (2011). *The Trading Book: A Complete Solution to Mastering Technical Systems and Trading Psychology*. McGraw-Hill. p. 272. ISBN 9780071766494. Retrieved 2014-07-07.

<sup>7</sup> J. Welles Wilder, *New Concepts in Technical Trading Systems*, ISBN 0894590278, Retrieved 2014-07-08

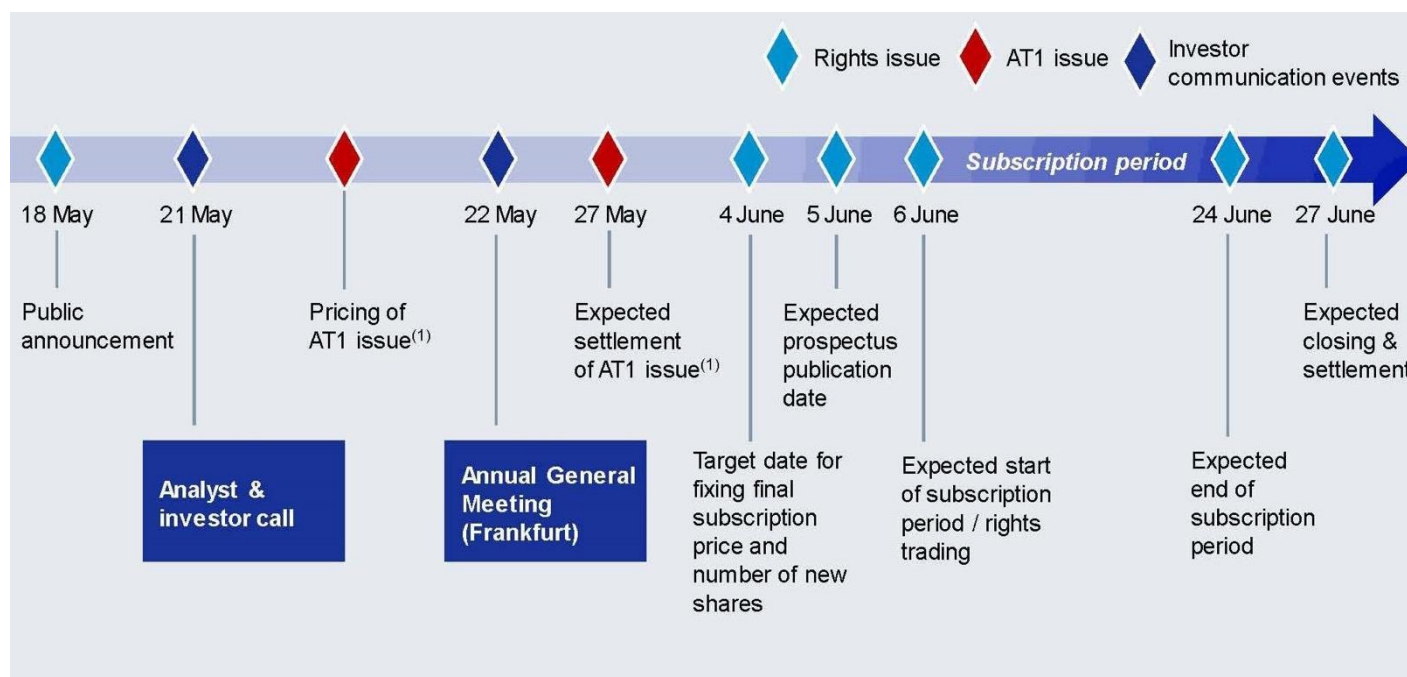
<sup>8</sup> John J. Murphy (2009). *The Visual Investor: How to Spot Market Trends* (2nd ed.). John Wiley and Sons. p. 100. ISBN 9780470382059, Retrieved 2014-07-09

<sup>9</sup> Appel, Gerald (1999). *Technical Analysis Power Tools for Active Investors*. Financial Times Prentice Hall. p. 166. ISBN 0131479024, Retrieved 2014-07-10

<sup>10</sup> Rigobon, Roberto, and Brian Sack. 2003. *Measuring the Reaction of Monetary Policy to the Stock Market*. Quarterly Journal of Economics, 118(2), p. 639-669, Retrieved 2014-07-10

find that the reaction to stock price drops turns out to be significant, while no reaction to an increase in stock prices is found in this period. The way to interpret this result is not necessarily that small, daily changes in stock prices lead to small, daily adjustments of monetary policy.

**Figure 3:** Timeline of key events in 2014. Deutsche Bank capital increase



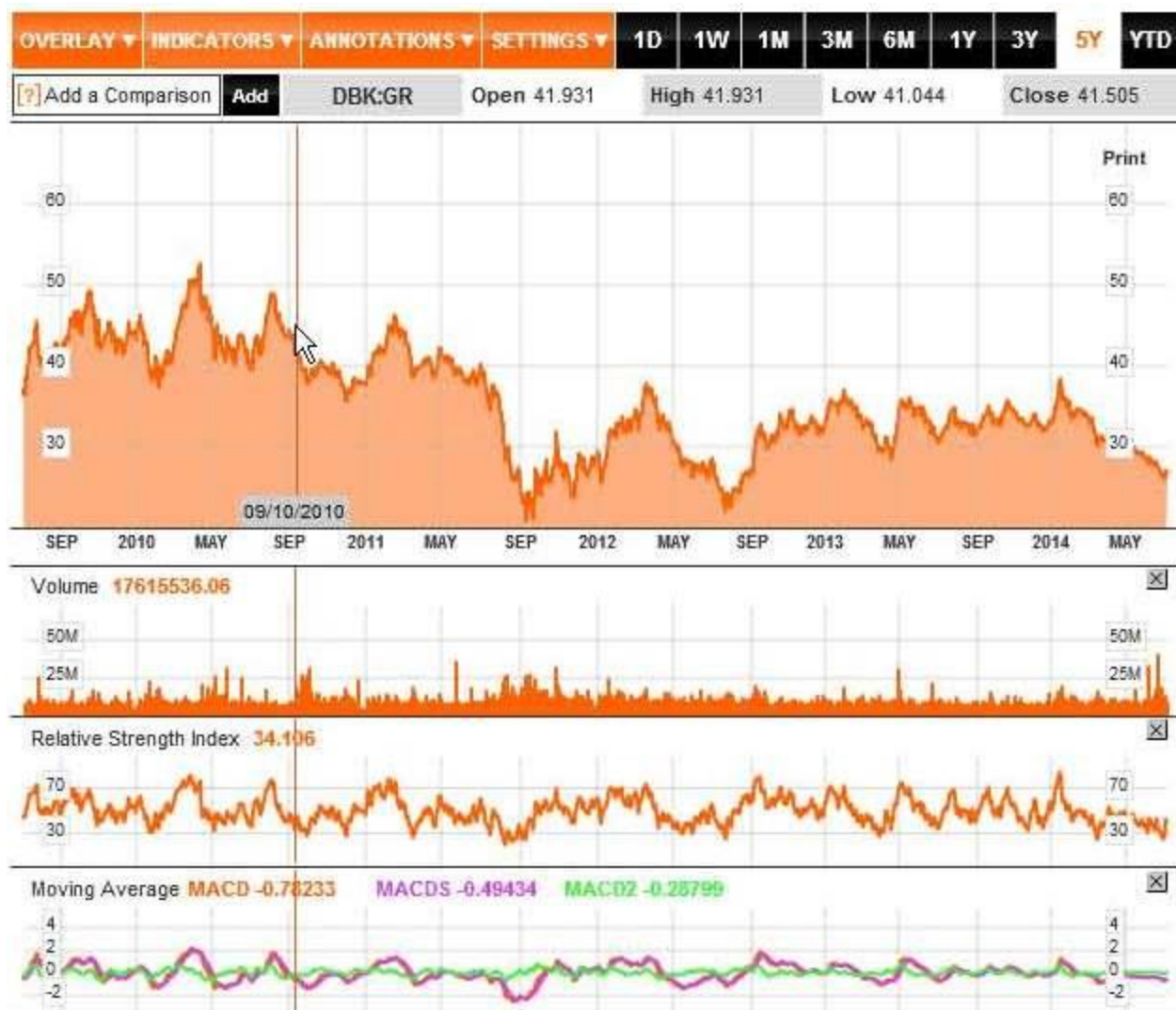
**Source:** [https://www.db.com/ir/en/download/Capital\\_increase\\_19\\_May\\_2014.pdf](https://www.db.com/ir/en/download/Capital_increase_19_May_2014.pdf) (06.07.2014)

### 3. MORE COMPREHENSIVE ANALYSIS OF CAPITAL INCREASING

In order to draw more reliable conclusion we should take a look what has happened with shares of the Deutsche Bank in previously capital increase. Deutsche Bank AG (XETRA: DBKGn.DE/ NYSE: DB) on October 6, 2010 completed the capital increase from authorized capital against cash contributions, which it had announced on September 12, 2010. In total, 308.6 million new registered no par value shares (common shares) were issued. 99.31 percent of the subscription rights were exercised by the owners of the subscription rights, and thus 306.51 million new shares were issued at a subscription price of EUR 33.00 per share. The remaining 2.13 million new shares that were not subscribed on the basis of the subscription offer were be sold on the stock exchange. The share capital (common shares) of Deutsche Bank AG has thus increased by EUR 790.1

million, from EUR 1,589.4 million to EUR 2,379.5 million, and the gross issue proceeds amounted to EUR 10.2 billion<sup>11</sup>.

**Figure 4:** Share price on September 10, 2010



**Source:** <http://www.bloomberg.com/quote/DBK:GR/chart> (06.07.2014)

Europe's No. 2 lender by assets has long faced doubts from investors and analysts about whether it has enough capital to absorb potential future losses and to meet increasingly stringent regulatory requirements. On paper, Deutsche Bank had one of the thinnest capital ratios among large European banks. Importantly, at this stage of our research share price increase or decrease is for further discussion taking into account asymmetric policy that capital increase could reflect a

<sup>11</sup> [https://www.db.com/ir/en/download/IR-Release\\_2010\\_10\\_06.pdf](https://www.db.com/ir/en/download/IR-Release_2010_10_06.pdf) (06.07.2014.)



response to share price changing. The magnitude of change is depending of the amount of new capital offered/needed. It is not immediately possible to break done all variable, due to large number of them, while any variable is correlated with share price but uncorrelated with other influencing factors. Hence, the downward sloping of Deutsche Bank share price in 2014. could be what happened in 2010. respectively taking into account capital share increase variable.

**Figure 5:** Share price on October 06, 2010



**Source:** <http://www.bloomberg.com/quote/DBK:GR/chart> (06.07.2014)

Following, Table 2. is analyzing share price of Deutsche Bank before and after capital increase in 2010.

**Table 2:** Analyzing share price between September 10, 2010 and October 06, 2010

	10.09.2010	06.10.2010	Change in %
Share price in € (close)	41.505	39.301	-5.61%
Share price in € (low)	41.044	39.105	-4.96%
Share price in € (high)	41.931	39.849	-5.22%
Volume	17615536	14916890	-18.09%
Relative Strength Index	34.106	42.823	20.36%
MACD	-0.78233	-1.2667	-62.76%
MACDS	-0.49434	-1.34893	-366.46%
MACD2	-0.28799	0.0824	349.50%

**Source:** Calculation of Author (06.07.2014)

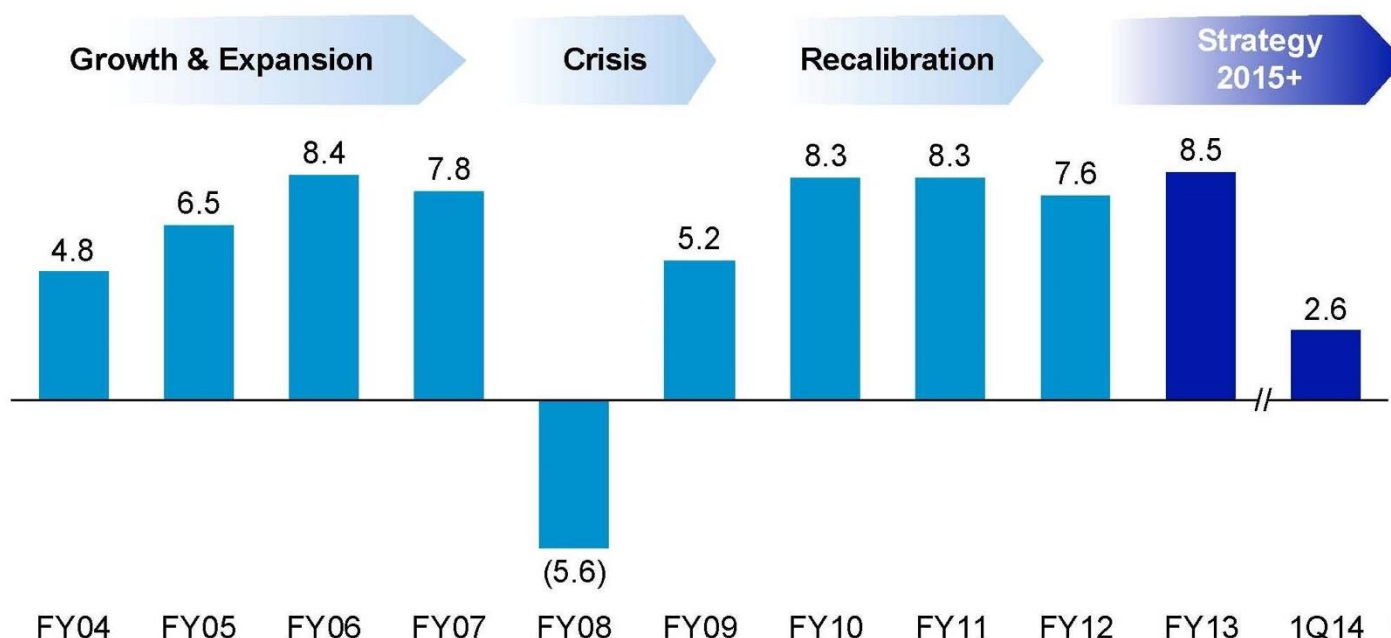
Firstly, from Table 2. we can conclude that the closing share price of Deutsche Bank has decreased by 5.61% after a capital increase. Secondly, from Table 2. we can conclude that the volume of Deutsche Bank share has decreased by 18.09% after a capital increase. Thirdly, from Table 2. we can conclude that the MACD indicator of Deutsche Bank share has decreased by 62.76% after a capital increase, MACDS has decreased by 366.46% but MACD2 has increased by 349.50%. Again, I find that the reaction to stock price drops turns out to be significant, while no reaction to an increase in stock prices is found in 2010. in period of capital increase. The way to interpret this result is not necessarily that small, daily changes in stock prices in 2010. lead to small, daily adjustments of monetary policy.

#### 4. CONCLUSION

In this research paper we have analyzed two distinctive monthly periods in two different non-following financial years of the Deutsche Bank taking into account the most important influencing factor, beginning date and ending date of capital increase. We did not analyze influence of other external influencing factors, such as geopolitical risk, wars etc. neither we did analyze in which business periods it happened. For example capital increasing in 2010 happened in Q3 and Q4 period, while capital increasing in 2014 happened in Q2.

*Figure following on the next page*

**Figure 6:** Profits in Deutsche Bank in billions of Euros



**Source:** [https://www.db.com/ir/en/download/Capital\\_increase\\_19\\_May\\_2014.pdf](https://www.db.com/ir/en/download/Capital_increase_19_May_2014.pdf) (06.07.2014)

In Figure 6. we can notice that in 2010. the Deutsche Bank had profits amounted 8.3 billion Euros, but previously in 2009. profits were only 5.2 billion Euros. In following 2011. profits were of Deutsche Bank were the same as in 2010. Furthermore, before capital increase in 2014. there is no profit falling while the Deutsche Bank had in 2013. about 8.5 billion Euros in earnings. Following is the first conclusion we could make from this research, capital increase in Deutsche Bank is not directly linked with downstream or upstream of its earnings. However, the value of this research will be less abstract if we compare, from tables above, what has happened with share price in period 2010. and 2014. respectively.

**Table 3:** Comparison 2010. and 2014. Deutsche Bank capital increase

	2010 Change in %	2014 Change in %
Share price in € (close)	-5.61%	-8.64
Share price in € (low)	-4.96%	-8.21
Share price in € (high)	-5.22%	-9.2
Volume	-18.09%	-56.49
Relative Strength Index	20.36%	-25.47
MACD	-62.76%	-67.82
MACDS	-366.46%	-74.85
MACD2	349.50%	-8.56

**Source:** Calculation of Author (06.07.2014)



From Table. 3 we can conclude that the Deutsche bank capital increase leads to share price falling. The percentage of share price falling is subject of many external and internal variables and we could not conclude that it would be greater than 5.61%, neither we can conclude that it would be less than 8.64%. Furthermore, we can conclude that the volume of traded shares is falling. But again, falling is subject of many external and internal variables and we could not conclude that it would be greater than 18.09%, neither we can conclude that it would be less than 56.49%.

In order to get “wider view” of external influencing factors to share price I suggest to analyze what has happened with the ratings of Deutsche Bank. A credit rating is an assessment of the solvency or credit-worthiness of debtors and/or bond-issuers according to established credit review procedures. The leading global rating agencies are Standard & Poor's, Moody's Investors Service and Fitch Ratings.

**Table 4:** Long Term Ratings of Deutsche Bank in periods of capital increase

	2014	2010	before 1998
Moody's Investors Service	A2	Aa3	Aaa
Standard & Poor's	A	A+	AAA
Fitch Ratings	A+	AA-	AAA

**Source:** <https://www.db.com/ir/en/content/ratings.htm> (07.07.2014)

Further explanation is needed, about the facts stated in Table 4. In group AAA, AA (S&P, Fitch) and Aaa, Aa (Moody's) are first-class banks which offer the investor almost risk free investment. The difference is than bank with AAA had better ratings than the one with AA or AA+. So, the conclusion is that the ratings of Deutsche Bank has fallen from fiscal year 2010. up to fiscal year 2014. Broader view is 1998. when the myth of Deutsche Bank has still existed with the best ratings worldwide. Despite the year by year downgrade of its ratings the Deutsche Bank is fighting to survive. The investors give money to the Deutsche Bank under market conditions, for that we have witnessed and studied capital increases in 2010. and 2014. Strategy 2015+ is still on the track. Five levers of Strategy 2015+ are key to Deutsche Bank in order to achieve this vision:

- Clients,
- Competencies,
- Capital,
- Cost and
- Culture.

Firstly, for Clients, Deutsche Bank is focusing on a dedicated portfolio of clients and regions, and a strategic emphasis is placed on growth in our home market Germany, in the U.S., and in Asia Pacific. For Competencies Deutsche Bank believe that its four core business pillars are well placed to balance its earnings mix and to satisfy increasingly complex and global customer needs. Closer collaboration between the individual corporate divisions and the infrastructure functions is expected to generate substantial synergies. In respect of Capital, Deutsche Bank is committed to further strengthen its capital ratios. Deutsche Bank has identified a series of measures to promote organic capital growth and further reduce risk-weighted assets (RWAs) including the creation of a dedicated Non-Core Operations Unit (NCOU) which is accountable and empowered to manage and sell non-core assets in the most efficient manner for the bank. For Cost, Deutsche Bank aim to secure its long-term competitiveness by achieving operational excellence with major reductions in costs, duplication, and complexity in the years ahead. Additionally, Deutsche Bank recognizes the need for cultural change in the banking sector and aspires to be at the forefront of this change. Compensation practices are under review, and client focus and teamwork are being emphasized to complement our performance culture, entrepreneurial spirit and cultural diversity<sup>12</sup>.

The real value of this research is somewhere in-between a theoretical and real share price before and after capital increase. Following this research we could conclude that any other Deutsche Bank capital increase could lead to any other share price falling and any other downgrading of its ratings. The down boundary is hard to estimate whilst that is for stock market to decide. Consequently, the Deutsche Bank banking business and the brand itself should be the real value for stakeholders. Thy myth of Deutsche Bank is closed to an end and this research should be taken as a warning. Furthermore, it will be the great of interest to research what will happened in the future with the share price of the Deutsche Bank with any other capital increase. The empirical relevance of this research is about to confirm or deny. The theoretical criticism and argues of the impact of capital increases to share price are made within modern theories and it should further discussed.

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## IMPLEMENTATION OF E-GOVERNMENT IN LIBYA

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### ABSTRACT

*E-government as an important step in the modernization of state administration, as well as in simplifying communications and doing business with individuals. The main goals of e-government are to reduce government spending and direct cost which will result in reducing the cost of services, achieve coordination among government institutions and solve the problems of overlapping and interdependencies of the transactions. In general, governments usually use three types of e-services to improve its functioning: G2C, G2B, and G2G. E-government may involve the granting of services through the Internet, Web, telephone, social media, wireless instruments or the other available communication systems. Libya as a developing country is in a process of establishing quality e-government services to improve its functioning, improving the productivity and efficiency of government agencies and facilitate the complicated procedures for its population. In this work we will present the benefits that Libya will gain from this, the most important e-governments initiatives and the most significant advantages and defects of these projects.*

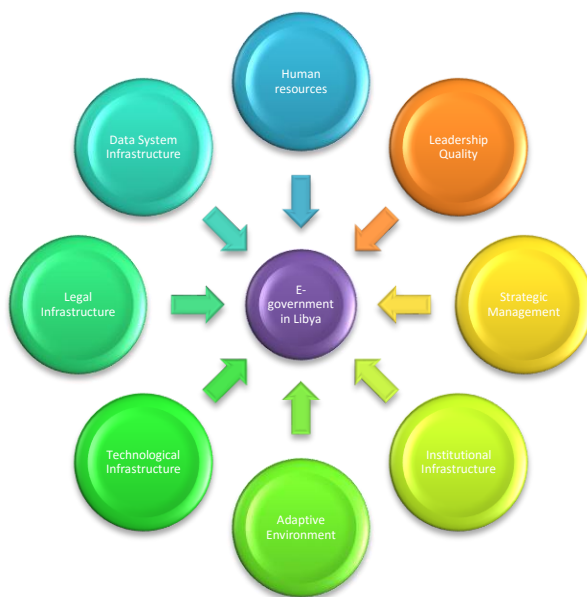
**Keywords:** *e-government, electronic services, G2B, G2C, G2C, Libya*

### 1. INTRODUCTION

National governments and localities, from every region of the world, are trying to put information at direct line and use mechanism to simplify the operations that were formerly complicated and electronically interact with citizens. The main goals of e-government are to reduce government spending and direct cost which will result in reducing the cost of services, achieve coordination among government institutions and solve the problems of overlapping and interdependencies of the transactions that might lead to administrative complexities which will result in long delays of delivering services, openness to the outside world and to identify new technologies in the provision of services and simplify government procedures in a shortest time possible, reduce cycle-time associated with the production and delivery, improve services through electronic reports that identify the main impediments to services and how to confront, develop and achieve that for users to increase the amount of trust and stability among citizens and easy access to electronic services through electronic publishing to achieve transparency and justice for all segments of society and promote democracy. Standard types of services include issuing identity cards, passport, birth and marriage certificates, judicial decisions, request a building permit, paying taxes, duties and new or used automobile registration, public libraries (availability of indexes, and research tools), enrollment in higher education, address change, and health-related services (e.g. providing interactive medical advice, taking appointments, ...), voter registration and pay any required fees using credit cards.

## 2. DEFINING E-GOVERNMENT

E-government (electronic government) represents usage of Internet for exchanging information, for providing services and transacting to citizens and businesses, as well as for other activities under government jurisdiction. The primary delivery models are: Government-to-Citizen or Government-to-Customer (G2C), are services for its citizens. Government-to-Business (G2B) are services that eliminating the redundant collection of data and better leveraging e-business technologies for communication. Government-to-Government (G2G) are services that facilitating for local and regional governments to meet reporting requirements and participate as full partners with the central and federal government in citizen services, while enabling better performance measurement.[7] For efficient use of these services there is a need for coordination activities and good cooperation between the public and private sectors, as well as citizens and government. Electronic Government essentially refers to the employment of information technologies and systems, communication technologies and other web-based telecommunication technologies to improve the efficiency of services delivery in the public sector and government agencies. [13] Advantage over the system based on extensive paperwork and numerous administration staff is in enabling increased portfolio of public services to citizens. The advantage is in better efficiency, easier accessibility and lower costs of services. World Bank gave frequently used definition: e-government refers to the use by government agencies of Information and Communication Technologies (ICT) such as Wide Area Networks (WAN), the Internet, and mobile computing that have the ability to transform relations with citizens, businesses, and the other arms of government. [10] In [2] it is explained that e-government consists of the creation of a website where information about political and governmental issues is presented.



*Picture 1: Infrastructure needed for quality e-government (Alshboul, R., (2012), Security and Vulnerability in the E-Government Society)*

## 3. IMPLEMENTATION OF E- GOVERNMENT IN LIBYA

Official websites posted by African governments give greater opportunities for getting quick access to government's information by everyone that needs it. Algeria, Bahrain Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Sudan,

Syria, Tunisia, UAE and Yemen are 18 Arab countries that have had electronic government portals in 2015. [1] Civil war is still going on in Libya. To establish strong institutions and a stable legal framework the government needs to provide peaceful environment and control of whole of its territory. Desired state for government, to make sure that its initiative is efficiently implemented and that desired goal of process is met, is to govern Libya in two mandates. After the Libyan Revolution the Ministry of communication and informatics proposed many initiatives to use technology to support government operations and to enhance the services provided to all citizens and businesses in Libya. [13] Despite numerous problems that Libya inherited from the former regime, and new problems that accompany political, social and economic reforms, it created some important websites and e-projects, increased the utilization rate and the presentation of the web on Libyan territory.

<b>Population</b>	<b>6,411,776 (July 2015 est.)</b>
<b>Literacy Rate</b>	91% (Ranks 13 in the World) [UN]
<b>International Poverty Line Population</b>	7.2% [UNDP]
<b>No. of Schools (Public, Private, Kindergarten, International, Technical)</b>	6586
<b>Telephones - mobile cellular</b>	10.1 million
<b>Internet users</b>	1.4 million (21.8% (2014 est.)rank 114

*Table 1: ICT and Educational Infrastructure of Libya ( ) Internet Usage Statistics for Africa (Africa Internet Usage and 2015 Population Stats), retrieved February 21, 2016, from <http://www.internetworldstats.com/stats1.htm>*

Because of political insecurity and many other problems that transitional country has to overcome Libya has not achieved desired aims. It has high literacy rate among the citizens and that is the great potential for these kinds of modernization processes. [9] Great problem is the security and privacy issue. The great challenges are equally in political, economic, social and technological aspects. Studying social aspect of Libya we can notice problems in lack of IT experts, despite of high literacy rate that puts Libya in 18<sup>th</sup> place on the world list. These demanding jobs are usually performed by experts from other countries. There is lack of IT skilled workforce, as a consequence of this there is no competitive environment and therefore the need for continuous knowledge improvement is very small. Political weakness for establishing good e-government practice is in poor legislation framework for IT sector that still discourage potential investment in developing this sector and re-building infrastructure. Another problem is in great number of employees in public sector which has no motivation for accepting e-governance, because this advanced system brings considerable savings, and among other things greatly reduces the need for so many employees. Validity of digital signature, cyber protection and acceptance of information from internet source by government officials are also the problems that needs to be solved. [3] Despite of high investment return potential, there is still lack of investors and small budget funding. Technological problems are in bad infrastructure worsened by war and terroristic activities, lack of IT standards and software licenses. E-government project in Libya is still in the early stages. The project aims to provide online services to citizens, businesses and other organizations around the country in order to alleviate the burden of centralized bureaucracy, and to reduce the need to travel either by car or public transport to the capital city, Tripoli. [3] UNDP is a partner with Libyan Government in its e-government strategy, of modernizing the systems of the Libyan Government and offering citizen access to government services through technology. UNDP is currently supporting with

the e-government team in setting up a Project Management office, and assisting with the assessments and coordination of three line Ministries: Industry, Health and Education. [12] UNDP will also be transfer knowledge initiatives where lessons learned and a range of international experiences will be introduced to Libyan stakeholders. This is the beginning of a partnership with the Libyan government in an effort to both modernize and deliver citizen services in a more effective way. [12] Poor access to ICT's and lack of educational possibilities caused by turbulent events in Libya might slow down enhancing public services and e-government as part of development.

#### **4. PLANS FOR IMPROVING E-GOVERNANCE IN LIBYA**

Libya has special features that create need for developing a detailed strategic plan to make process of developing stabile and efficient e-government system as simple and easy as it is possible. This is especially important for parts of the country that is far from big cities and to places that built strong and well organized local governing. The main goal of e-Government services is to serve the community better, to minimize the bureaucracy, time, money and efforts of Libyan people. Including e-government in everyday use is most important for education, health care, civil and public services as well as in the private sectors. [4] The current political and state-building transition provides an opportunity to strengthen this initiative through the development of more effective ministry websites along with ICT training for government employees. [6] The ministry websites currently provide citizens with information and gives contribution to reduce gender or social obstacles, also geographic distance between administrative centers. The infrastructure is still being built and costs to the end users are high. Furthermore, computer and media literacy must be developed alongside infrastructure if such investments are to be fruitful. E-Libya policy includes e-learning as a primary area of focus. The international community should support this initiative's plans to integrate ICT training into the public education system. [6] In order to develop a comprehensive strategy and to determine the roadmap for the implementation of key elements of e-government, NTC has contracted with PricewaterhouseCoopers (PwC). [8] Required work is best implemented in several stages: First is evaluation stage, of the current situation and systems. Secondly the development of the strategic framework for E-government, including the vision, mission, strategic objectives, principles and values. Third stage is the development of future reference designs for e-government, which includes infrastructure designs, inter-governmental applications, the common e-services applications, shared data and information, and electronic service delivery platform. Fourth stage is the development of the roadmap for the implementation of projects for e-government, in addition to risk management plans. Fifth stage represents governance of e-government project. Sixth stage means the development of specifications booklets for projects of the e-government for the first two years. Seventh stage is the development of strategic frameworks for e-commerce, e-learning and e-health programs. Eighth stage includes training, project management, quality assurance and change management.[8]

#### **5. COOPERATION WITH COUNTRIES WITH GOOD E-GOVERNMENT PRACTICE**

Using advanced technologies such as e-Government services is everyday practice mostly used developed economies of the world. Accepting this practice from country that has great, stabile years of experiencing system, like United Kingdom, could be very valuable for the Libyan state and people. The Government of the United Kingdom and Transitional Government of Libya, in 2012 made agreement for developing a modern and reliable communications infrastructure in Libya, spreading the practice of open government. [11] Two governments agreed to leverage the extensive knowledge of the UK government in the following areas: Information and Communication Technology (ICT) strategy. Establishing a regulatory framework Physical ICT

infrastructure Value-added ICT applications, including Open Government, e-Government, e-Commerce and e-Learning. [11] The goals of this cooperation are identifying opportunities for investments in Libya, to initiate responsive government activities, to increase access to modern technology, to advance and establish infrastructure, to bring technological innovation systems, and to help in coordination of personnel. These activities between two governments may include: Sending technical experts from the United Kingdom, and other governments and international private sector organizations to develop proposals, provide technical and strategic guidance, training, and education, as well as monitor projects and evaluate results; Assisting in improving physical infrastructure capabilities, promoting affordable access to the internet, designing a formation of policies to govern the emerging telecommunications market; and Other forms of cooperation mutually determined among the participants.[11]

## 6. CONCLUSION

Libya is in very vulnerable transitional state with war going on its territory, unstable divided government, large influence of tribe authorities at local level, and great willing but lack of possibilities to establish solid institutions. Despite of impressive literacy rate among the population, because of specific political environment large number of the Libyan population had little contact with computers and the Internet. Also because of turbulent events population is skeptical to innovation technology and suspicious on government work and intentions. Libya is in the beginning of developing e-governance services and its implementation and there is still a lot of space for improvement and learning. Careful planning, intelligent utilization of resources and great efforts of governance can quickly put Libya in place with developed countries.

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## **CORRUPTION AND GREY ECONOMY; ANALYSIS OF SERBIA**

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### **ABSTRACT**

*This work contributes to current debates on the gray or informal economy and related issues of corruption in the state administration. In spite of the fact that are gray economy and corruption a global problem in all countries of the world, very few of empirical studies have been attempted to investigate the possible link between gray economy and corruption, and their impact on development in the countries in transition, especially in the Republic of Serbia. The lack of the studies can be explained by the fact that both "gray economy" and "corruption" are ultimately unobservable. For these reasons, the author of this paper will try using the MIMIC an CPI (Corruption perception index) approach to filling the gap which is missing in the analyzing these relations, with especial focus on the Republic of Serbia. The findings from this study indicate that there is a positive causal relationship between gray economy and corruption in the Republic of Serbia.*

**Keywords:** corruption, gray economy, government

### **1. INTRODUCTION**

In recent years, the social phenomena that are labeled under the term corruption and gray economy, have attracted a great deal of attention of academic and professional community. The informal economy or Informal Sector (IS) and corruption plays a significant role on employment, income and supplying overlooked markets in developing countries. Corruption and gray economy, by self, does not produce poverty. Rather, corruption and gray economy have got direct consequences on economic and governance factors, intermediaries that in turn produce poverty. Among the factors addressed are the high costs of formalisation and the lack of incentives for operating in the formal sector. Many companies around the world operate in the "informal economy," using the mechanism of bribery, in which they miss report employment, avoid certain taxes, ignore product quality and worker safety regulations, violate copyright and intellectual property laws, and sometimes do not register as legal entities. Over half of the informal enterprises lack accounting records. The problem is particularly acute in developing countries, where companies that operate informally produce as much as 80 percent of the output in some industries. Only a few policy makers are interested in this issue. Although informal companies have small-scale production and lower productive methods, they gain a substantial cost advantage that allows them to stay in business by avoiding taxes and regulatory obligations. In these conditions, formal companies have difficulty in gaining market share resulting in slower economic growth and job creation. Observed from this perspective, we can tell that corruption and the existence of gray economies are constant problems of the world, and their conceptualization and measurement remains problematic as the concept are multidimensional and political.

For this reasons, only a few empirical studies and academic papers study the potential link between corruption and the grey economy. What little evidence is available comes from surveys of leading international organizations, such as World Bank, OECD et al. Based on some empirical studies, several theoretician are concluded that gray economy and corruption are complement, this means that an increase of gray economy will result in an increase of corruption and vice versa. Other empirical studies provided the opposite findings in which corruption and gray economy are negatively correlated. In their study, Johnson et al. (Johnson, Kaufmann, Shleifer 1997, pp. 28) argued that the existence of shadow economy will result in a reduction of an official economy. Particularly, according their opinion, individuals and businesses have motivations to work in the underground economy, and they are prepared to be used for bribery, or pay civil service, official employees, for corruption to avoid checks, getting caught and pay penalties by the government. In contrast, Choi and Thum (Choi, Thum, 2005, pp. 817-836) and Dreher et al. (Dreher, Kotsogiannis, McCriston, 2009, pp. 773-796) argued that as long as businesses and individuals are joining in the shadow economy, there are no more opportunities for corrupt government officials to exploit. The expected result of this understanding of the relationship between the shadow economy and corruption is that an existence of a gray economy will reduce a level of corruption in the official economy.

## **2. CORRUPTION AND GRAY ECONOMY**

### **2.1. Gray economy**

The term Informal Sector was first introduced by Keith Hart (Hart K, 1973, pp. 61-89). The informality of firms has since been described in relation to interrelated aspects: compliance with government regulations (i.e. registration, payment of tax and adherence to labour regulations); size of the firm; firm level resource endowment and applied technology (i.e. labour or capital intensive), location, the physical place of operation and the characteristics of workforce and ownership. The term informal economy triggers a lot of confusion and interpretations depending on how people look at it. Economic and financial planners call it the Unobserved Economy. Labour advocates call it the Unorganized Sector. Social security officials label it the Unprotected Sector. Statistical authorities name it as Uncounted. Others say they are simply the poor and marginalized people who are forced to create their own employment. There is a huge debate on what the informal economy is.

We can tell that the term “informal economy”, “underground economy”, “gray economy” or “shadow economy” became current in the 1970s as a label for economic activities which take place outside the framework of corporate public and private sector establishments. However, the gray economy is a multi-dimensional or multi-faceted phenomenon, which inevitably accompanies formal economies through the world. This is an unobservable economic phenomenon, and no consensus exists as to the definition of the gray economy. Shadow, or gray economy is defined in theoretical and empirical studies to include economic activities which are measured but not reported into the gross national products (GNP) of a particular nation (Feige et al., 1986., A re-examination of the “underground economy” in the United States, IMF Staff Pap 33(4), Suppl Public Financ/Financ Publiques 49: 119-136). Also, the gray economy is defined as part of market activities that are either unregulated or adequately regulated by the state (Garcia-Bolivar, Omar E., 2006) or as a set of activities that generate revenue and include regular goods, but they are beyond the scope of state regulation (Castells M. and Portes A., 1989). Confusion about the nature itself of the gray economy is obvious; for some it is also obvious that there is no single shadow economy but many, which are characterized by the particular institutional set of rules that they circumvent and the metric for measuring the

dimensions of each underground activity is the aggregate income generated by the activity. However, although there are many definitions of the gray economy, it is difficult to find a precise and uniform, generally accepted definition. Defining gray economy is an important initial approach to understanding the characteristics and determinants of what and how this “invisible hand” works. Most researchers and experts view underground economy from different perspectives, either positively or negatively, with high degree of diversity. It is important to examine the characteristics and determinants of gray economy because: (1) A need for standardize definition with unambiguous understanding of Gray Economy; (2) Avoid errors in categorizing the Gray Economy Activities and (3) Identify areas of focus for better controlling the growth of Gray Economy.

According to Frey and Schneider (2000), the most accurate and highly referred definition relates underground economy to officially measured national income generated by those non-reporting productive or value-added activities that is supposedly to be calculated in the Gross National Product (GNP). In 1993, System of National Accounts (SNA) has worked out a good benchmark for the definition of the Underground Economy which is “the value-added activities that the official statistics do not register although they should” (Bovi and Dell’Anno, 2009).

According to Schneider and Enste (2000), the definitions on shadow economy often vary according to the method of measurement. Table 2. depicts the types of Underground Economic Activities which is commonly used by other researchers as references.

Activities	Monetary transactions		Nonmonetary transactions	
ILLEGAL ACTIVITIES	Trade in stolen goods, drug dealing and manufacturing, prostitution, gambling, smuggling, fraud		Barter of drugs, stolen or smuggled goods.	
			Producing or growing drugs for own use. Theft for own use	
	<b>Tax evasion</b>	<b>Tax avoidance</b>	<b>Tax evasion</b>	<b>Tax avoidance</b>
LEGAL ACTIVITIES	Unreported income from self-employment	Employee discounts, fringe benefits	Barter of legal services and goods	All do-it yourself
	Wages, salaries and assets from unreported work related to legal services and goods			Work and neighbour help

*Table 1. A classification of activities in the shadow economy  
(source: Lippert, Walker, 1997., pp. 56)*

From Table 1., it is obvious that a broad definition of the gray economy includes unreported income from the production of legal goods and services, either from monetary or barter transactions – and so includes all productive economic activities that would generally be taxable were they reported to the state (tax) authorities.

## 2.2. Corruption

The corruption is an often used, but very rarely defined phenomenon of the social life. Corruption or „level of corruption“ is widely used in public discourse and usually hold a

twofold common-sense meaning. On one hand it stands for those illegal practices, in which citizens or organizations bribe officials in charge for awarding permissions, contracts, or to escape punishment or fines for offenses they committed. Simpler is the narrow definition of corruption: to obtain privileges against law or against the rules of some bureaucracy. Many scholars argue, however, that corruption is a broader phenomenon, or rather, a hardly definable set of phenomena, including achieving several advances through personal networking; paying gratitude money or giving gifts for usual services, what are already reimbursed from customers or state resources.

Its roots lie deep in bureaucratic and political institutions, and its effect on development varies with country conditions. But while costs may vary and systemic corruption may coexist with strong economic performance, experience suggests that corruption is bad for development. It leads governments to intervene where they need not, and it undermines their ability to enact and implement policies in areas in which government intervention is clearly needed—whether environmental regulation, health and safety regulation, social safety nets, macroeconomic stabilization, or contract enforcement.

However, corruption is a concept used in common by many social scientists, regarding which a wide range of literature exists from sociology to political science to jurisdiction and to public administration. 1980 on, studies on economics and public finance have had an agenda in which to comprehensively discuss the above matter. (Celen M., 2007., *pp.* 85). In recent years, and especially in the decade of the 1990s, a phenomenon broadly referred to as corruption has attracted a great deal of attention. In countries developed and developing, larger or small, otherwise or market-oriented, because of accusations of corruption, governments have fallen, prominent presidents of countries, prime minister or other politicians have lost their official positions. Function of corruption which leads to unfair profits under unfair competitive conditions appeals to those who would like to earn easily and thus spreads across all social strata. Corruption is not only a behavior unique to politicians and bureaucrats but also to those with economic power who do not have public power but can become corruptive. (Culpran, R, 1990., *pp.* 31-45).

With reference to the study of origins of words, otherwise referred to as etymology, it is accepted that the word “corruption” is a derivative of the Latin word called “*corruptus*” which simply means to break. This derivation is another way of laying emphasis on the destructive effect of the word on the societal fabrics and the fact its popular meaning encapsulates the situation where agents and public officers do break the confidence that is entrusted of them. According to some interpretations, corruption is a compound word in which the first part of the “*cor*”, indicates agreement, arrangement, and the second part, from the verb “*rompere*” indicates the crackdown and the betrayal of the given agreement or order of things. (Vujaklija M., 1961., *pp.* 479). Attribute corruption in some Latin sayings extends not only to human but also to human creations, such as the State, but also says that she is the most vicious state in which most of the law, *Corruptissima and re publica plurimae leges*. Seen from this perspective, we can say that corruption as a phenomenon, essentially determined by immorality, or moral deviance, but can I assume that in the societies where they are not accepted and consistently applied strong moral rules that require condemnation of corruption, provides conditions for greater susceptibility to corruption of the citizens.

Considerable difficulties can appear in definition of corruption as it includes a variety of complicated elements, processes and associations. In addition, it is difficult to make a universally valid definition of corruption since it also varies across nations, regions, cultures

and economic systems (Lamour, P., 1997., pp. 3-4). In a most general definition, corruption implies that wielders of powers can take advantage of it in such a way to provide a given interest for themselves, the concerned individuals or groups of individuals. However, in this sense an institutionalized and thus authoritative use of power is in question rather than imposition of force. In this connection, although corruption can be variously studied such as private or public sector, voluntary-forcible, high level-low, its essence is almost the same in terms of provision of unfair profits. (Cingi, 1994., pp. 3).

Arguably, the most concise and acceptable definition is the one given by Transparency International (TI); an anti-corruption global organisation with its headquarters in Berlin, Germany, that was set up in 1993., with the initiative of Mr. Peter Eigen a former World Bank regional director. It defines corruption as "*the misuse of entrusted power for private gain.*" (Transparency International). This definition seems very simple, although it excludes bribery which happens wholly in private sector. Perhaps, it includes other facets of the offences of corruption strictly so called and bribery corruption process. But generically, corruption is the abuse of a position of trust to gain an unfair advantage. (TI, 2006., *Global Corruption Report*, Transparency International, Berlin). Structurally speaking the three constituent elements of definition corruption are: public-authorities, their use and benefits achieved. According to the definition by the World Bank which has been popularized in various studies, corruption is that public power is used for personal interest only. (World Bank, 1997., pp. 7.). At the end, we can tell that there is no agreement among anticorruption practitioners on a single definition of corruption. In fact, neither the UNCAC (United Nations Convention against Corruption, adopted by the United Nations General Assembly in 2003.) nor the OECD Anti-Bribery Convention provides a broad definition of corruption. Rather, they define specific corrupt acts that should be criminalized.

Added to these merely theoretic and loose definitions, researcher needs little input information to make her studies more effective. In each country there are areas, where traditional corruption is more widespread and areas, where it is virtually unresent. Though, the measurement of the narrowly defined corruption has relatively long tradition and international researches provide sufficient basis to prepare comparative measurement of the level of these activities. The issue gets even more complicated as we try to capture various corruptive activities. What exactly are these? In this area a series of qualitative or pilot research needs to be carried out in order to map the structure of behaviors, practices and activities, which make a society to think that "corruption is there."

### **2.3. Gray economy versus corruption**

Quite often gray economy and corruption are seen by researchers as twins, who need each other or as two completely opposite factors who fight against each other. For a social scientist this means that, theoretically, corruption and the gray economy can be either complements or substitutes. Theoretically, the relationship between corruption and the gray economy is thus unsettled. There is, however, reason to believe that the relationship might differ among high and low income countries. For low-income nations, businesses starting their business provide bribes to corrupt government official with an expectation that their economic activities in the shadow sector will not get caught by the government. In high income countries, the official sector provides public goods like the rule of law, enforcement of contracts, and protection by an efficient police. Usually, only craftsmen or very small firms have (or take) the option of going underground. In this case, the gray economy is hidden from tax inspectors and other officials. In other words, there are no bribes necessary or possible to buy the way out of the official sector. In conclusion, a relationship between corruption and gray economy appears to

rely on the national income level and the effectiveness of the legal system. Theoretical, Johnson et al. (Johnson S., Kufmann D., Shleifer A., 1997., pp. 159-221), concluded that corruption and shadow economy are complement. Using a full employment model, workers can choose to work in either the shadow economy will result in the reduction of an official economy. In addition, corruption will provide an incentive for businesses and individuals to join a underground economy, as a result, an increase in corruption will lead to an increase in gray economy. For the other, Dreher et al. (Dreher A., Kosogiannis C., McCorriston S., 2008., *Corruption around the world: evidence from a structural model*, J Comp Econ 35 (3), pp. 443-446) concluded corruption leads to a reduction of a shadow economy. Gray or shadow economy and corruption are substitute. The presence of economic activities in the undergorund sector will reduce the official economy. Payments will take place in a hidden environment. Corrupt government official are not provided any chance to be corrupt because all transactions are now hidden, as a result, they argued that gray economy is negatively related to corruption.

It is commonly agreed by economic policy analysts that shadow business activities and corruption practices are interlinked phenomena. A lower level of corruption in the public sector should restrict the grey economy spread, and vice vers a – with restrained “shadow operations” (providing “black account” funds for bribery purposes) corruption would be substantially hindered. In an attempt to test a hypothesis for such an interaction we check for an association between the assessment of (a) the spread of corruption practices among public sector official and the grey economy spread (b1) in the country and (b2) in the branch.

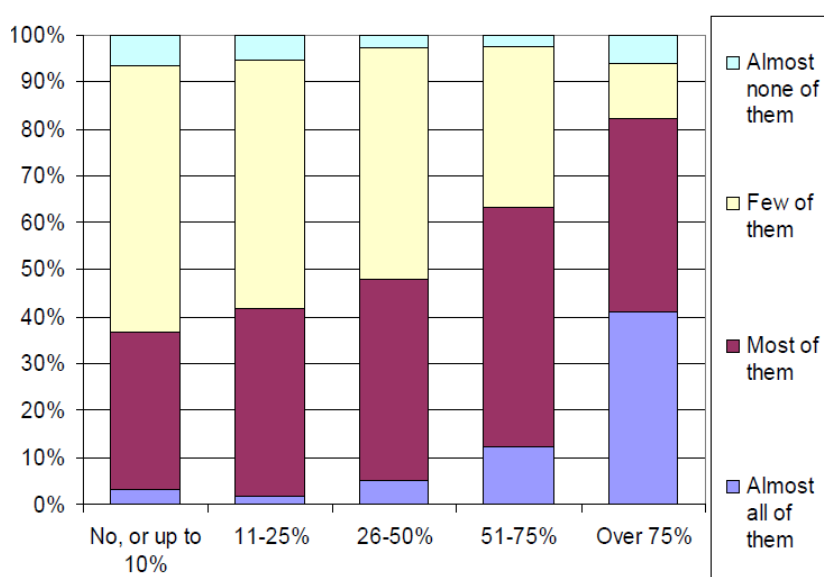


Figure 1.: Distribution of responses to the question “How would you assess the involvement of public sector officials in corruption?”, conditional on the assessment of the grey conomy share in the country (source: Goev V., Boshnakov V., 2012., pp. 252)

## 2.4. Causes and consequences of gray economy

The cosequences of informal activities are wide-ranginig and warrant attention from a number of policy perspectives. The economic literature distinguishes three types of causes of the gray economy (Schneider, F., Enste D., 2009., pp.10):

1. The burden of direct and indirect taxation, bouts actual and perceived: a rising burden of taxation provides a strong incentive to work in the shadow economy;
2. The burden of regulation as proxy for all other state activites. It is assumed that increase in the burden of regulation give a strong incentive to enter the shadow economy;

3. The tax morality (citizens' attitudes toward the state), which describes the readiness of individuals at least partly to leave their official occupations and enter the shadow economy: it is assumed that a declining tax morality tends to increase the size of the shadow economy.

Following the definition, Table 2. presents an overview the most important determinants influencing the grey economy, which will be used in this work paper.

Casual Variable	Theoretical reasoning
Public Sector Services	An increase of the shadow economy may lead to fewer state revenues, which in turn reduce the quality and quantity of publicly provided goods and services. Ultimately, this may lead to increasing tax rates for firms and individuals, although the deterioration in the quality of the public goods (such as the public infrastructure) and of the administration continues. The consequence is an even stronger incentive to participate in the shadow economy. Countries with higher tax revenues achieved by lower tax rates, fewer laws and regulations, a better rule of law and lower corruption levels, should thus have smaller shadow economies.
Tax Morale	The efficiency of the public sector also has an indirect effect on the size of the shadow economy because it affects tax morale. Tax compliance is driven by a psychological tax contract that entails rights and obligations from taxpayers and citizens on the one hand, but also from the state and its tax authorities on the other hand. Taxpayers are more heavily inclined to pay their taxes honestly if they get valuable public services in exchange. However, taxpayers are honest even in cases when the benefit principle of taxation does not hold, i.e. for redistributive policies, if such political decisions follow fair procedures. The treatment of taxpayers by the tax authority also plays a role. If taxpayers are treated like partners in a (tax) contract instead of subordinates in a hierarchical relationship, taxpayers will stick to their obligations of the psychological tax contract more easily. Hence, (better) tax morale and (stronger) social norms may reduce the probability of individuals to conduct undeclared work.
Deterrence	Despite the strong focus on deterrence in policies fighting the shadow economy and unambiguous insights of the traditional economic theory of tax non-compliance, surprisingly little is known about the effects of deterrence from empirical studies. This is due to the fact that data on the legal background and the frequency of audits are not available on an international basis; even for OECD countries such data is difficult to collect. Either is the legal background quite complicated differentiating fines and punishment according to the severity of the offense and the true income of the non-complier, or tax authorities do not reveal how intensively auditing is taking place. The little empirical survey evidence available demonstrates that fines and punishment do not exert a negative influence on the shadow economy, while the subjectively perceived risk of detection does. However the results are often weak and Granger causality tests show that the size of the shadow economy can impact deterrence instead of deterrence reducing the shadow economy.

*Table 2.: The main causes determining the shadow economy  
(source: Schneider F., Buehn A., 2012., pp.8)*

Based on the analyses, the effects of the shadow economy are: (1) unfair competition generated by actors who operate their business in the grey zone, causing companies who do business legally to close or switch to shadow economy, the firing of employees and a decrease in investments; (2) reduced budget revenues that cause poorer quality of public services, such as: education, health, police, judicial system, utilities services, etc.; (3) compromised rights of employees, as well as their safety and health (lack of payments of contributions for pension and disability insurance, health insurance and unemployment insurance, insurance against injury at



work for students hired through student cooperatives), compromised quality and health safety of products.

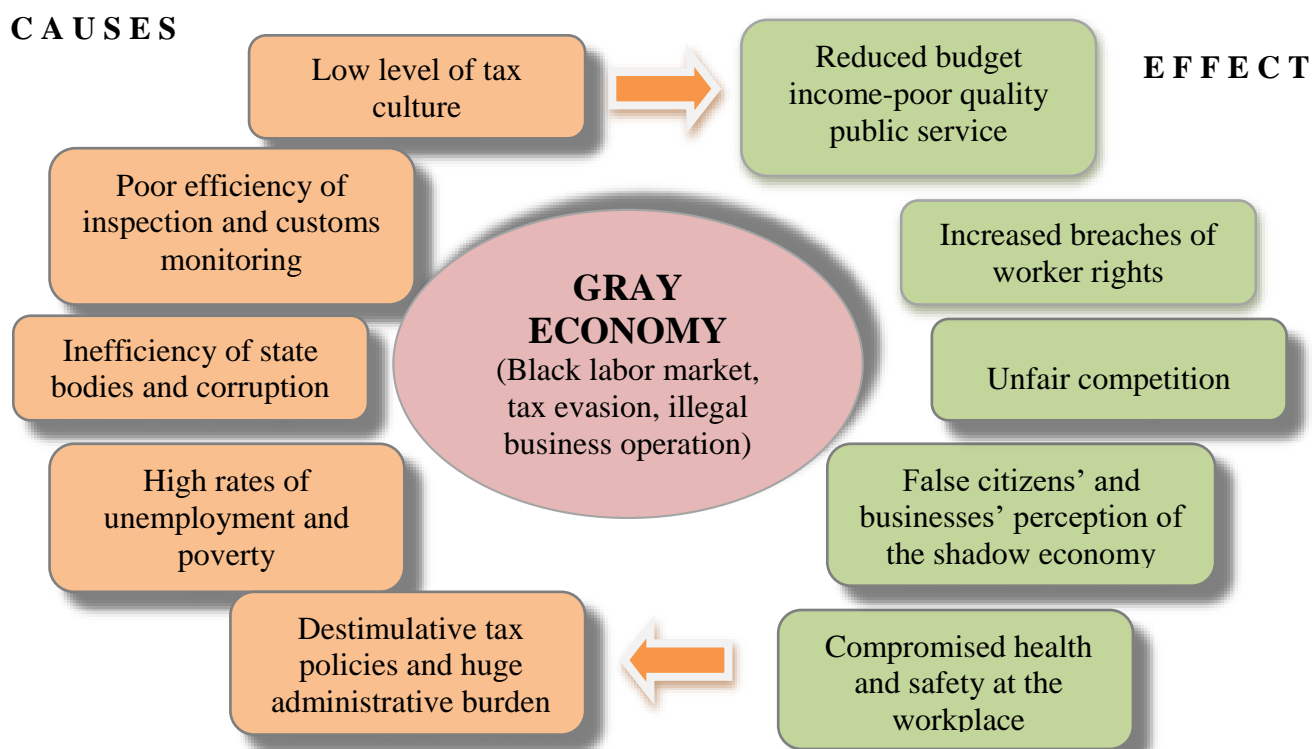


Figure 2.: Causes and consequences of gray economy  
(source: National program for Countering the Shadow Economy, 2015, NALED, pp. 4)

## 2.5. Causes and consequences of corruption

There is a wave of empirical investigations on the causes and consequences of corruption. These investigations by and large relate to cross-country analyses, based on comparative assessments of the extent of corruption in various countries. Corruption is often cited as one of the key hurdles to improving democratic governance in countries. Most of literatures on corruption referring corruption to many phenomena i.e.: bribery, collusion, nepotism, and so on. We can say, corruption discourages investment, limits economic growth, and alters the composition of government spending, often to the detriment of future economic growth.

Corruption is generally connected with the activities of the state and especially with the monopoly and discretionary power of the state. Noble Laureate in economics, Gary Becker pointed out in one of his Business Week columns, if we abolish the state, we abolish corruption. But, we know that a civilized society cannot function without a state and in modern societies the state must have many functions. Thus the solution to the problem of corruption may not be a simple as just reducing the size of the state. Rather, the way the state operates and carries out its functions is far more important than the size of public sector activity. The crucial question is: is it possible to measure corruption, and if so, how? Corruption is a variable that cannot be

measured directly. However, the number of indices focused on corruption measurement has grown exponentially over the past decade. They range from some of the more established and widely used indicators like Transparency International's (TI) Corruption Perceptions Index (CPI) and the World Bank's Worldwide Governance Indicators (WGI), to a newer generation of measurement and assessment tools like TI's Global Corruption Barometer and Global Integrity's Global Integrity Index.

In response to the rise in the number of governance indicator sources (best cataloged by the UNDP's Governance Indicators: A Users' Guide), the trend has been for experts in the field, particularly national stakeholders and aid donors, to decry this "proliferation" of corruption and governance assessments as overly duplicative, distracting and harmful to effective donor coordination and harmonization on the governance reform agenda. Actual evidence of that harm is harder to come by, but the argument seems compelling.

The reality is actually quite different from what many believe. Without a doubt, the number of indices, toolkits and qualitative corruption assessments has increased during the past decade. But almost without exception, the vast majority of these toolkits are fundamentally – and importantly – different in scope, units of analysis and methodologies. In other words, they are measuring very different things, despite having similar sounding titles.

A user's primary challenge is interpreting which measurement tools are most appropriate for his or her purposes. The labels are not going to help, so the only way to successfully determine which metrics are most appropriate is to do what most users don't do – take the time to understand the methods and objectives of each measurement tool prior to implementation. As a first step, this section analyzes existing corruption indicators (and some closely related governance indicators) by introducing four conceptual lenses. Through these lenses, we can better view and understand each indicator's conceptual focus and measurement methodology. This will be helpful for users trying to understand which set of indicators could be most relevant in identifying and addressing specific governance and corruption challenges.

Existing corruption indicators can be classified into four categories, constituting a sort of informal taxonomy: the scale and scope of indicators, what is actually being measured, the methodology employed, the role that internal and/or external stakeholders play in generating the assessments. This approach should help the user better understand the data presented. The main types of corruption indicators are: (1) Perception-based indicators and experience-based indicators - indicators based on the opinions and perceptions of corruption in a given country among citizens and experts, (2) Indicators based on a single data source and composite indicators, These indicators measure citizens' or firms' actual experiences with corruption, such as whether they have been offered or whether they have given a bribe (3) Proxy indicators - buoyed by the belief that corruption is impossible to measure empirically, proxy indicators assess corruption indirectly by aggregating as many "voices" and signals of corruption, or by measuring its opposite: anti-corruption, good governance and public accountability mechanisms.

For this paper, it is noted that empirical studies on corruption have utilised a perception index of corruption representing for a level of corruption in the economy. It is argued that the perception-based indices reflect the quality of a country's institutions rather than is actual degree of corruption. Mocan N (Mocan N., 2004., pp. 159) argued that a perception of corruption from businesses and individuals is distorted. This theoretical considerations, starts from the premise that the perception of corruption is not a relevant indicator of the actual level

of corruption in a society because the image of corruption represents a distorting mirror in business circles and among individuals.

There are many sources of data available that capture aspects of corruption, transparency, accountability, and integrity, but few datasets focus exclusively on measuring levels of corruption, except for policy experiments. It is difficult to capture precise data on corruption, hence the many datasets on perceptions and experiences of corruption.

<b>Dataset</b>	<b>Method</b>	<b>Data a Generated</b>	<b>What is being measured?</b>
Global Integrity Report	Expert survey	Assessment	Legal framework and implementation of mechanisms for transparency, accountability, and integrity
TI Corruption Perceptions Index	Survey	Perceptions, Experiences, Assessments	Perceptions and experiences with corruption
TI Global Corruption Barometer	Survey	Perceptions, Experiences	Perceptions and experiences with corruption
TI Bribe Payers Survey	Survey	Perceptions	Perceptions of corruption
Kenya Bribery Index	Survey	Experiences	Experiences of citizens with corruption
Enterprise Surveys	Survey	Experiences	Private-sector experiences with bribe paying to public officials in specific sectors
Governance and Corruption (GAC) Diagnostics	Survey	Perceptions, Experiences	Perceptions and experiences of corruption (administrative, state capture, bidding, theft of public resources, purchase of licenses) in the public and private sectors
Public Expenditure Tracking Surveys	Indicator-driven case studies	Experiences, Assessments, Administrative data	Flow of resources from origin to destination and determination of the location and scale of anomaly
Afrobarometer, Latinobarometer, Asianbarometer, Arab Barometer	Citizen surveys, Household surveys	Perceptions, Experiences	Perceptions and experiences of citizens with corruption
Shudify	Exit survey	Experiences	Experiences of bribery by citizen users at local service delivery centers

*Table 3.: Selected Measurements of Corruption*  
(source: UNDP, 2015., pp. 15)

While political-economic analyses are promising developments in refining the corruption measurement toolkit, they too have their limitations. Members of a conference on donor approaches to governance assessments organized by the Development Assistance Committee of the Organization for Economic Co-Operation and Development (OECD DAC) put it this way: “A power analysis in development projects does little to help donors understand how to

support and operationalize the findings. Nevertheless, newer tools may help make such analyses more actionable in the future.” (OECD/DAC GOVNET Conference on Governance Assessment and Aid Effectiveness, 2008., Concept Paper and Agenda Annotations: 3.)

Another important distinction between the various corruption measurement tools is the different methods and techniques that the tool creators have adopted. These are not merely technical footnotes to be glossed over; rather, they have dramatic impact on the toolkit’s strengths and limitations. Users must keep methodological differences in mind when choosing their tools.

### **3. MODELS ANALYSIS OF GRAY ECONOMY AND CORRUPTION, INDICATORS IN SERBIA**

#### **3.1. Extent of the shadow economy in Serbia**

The shadow economy in Serbia has been estimated using three methods:

- a) the MIMIC method, a modelling-based approach covering Serbia and ten other Central and Eastern European countries between 2001 and 2010, pursuant to which the size of the gray economy is estimated at 30,1% GDP in 2010.;
- b) the Household Tax Compliance (HTC) method, based on 2010 data for Serbia, which is an indirect method as it is based on macroeconomic data, the extent of the shadow economy in Serbia at 24 percent; and
- c) the Survey on Conditions for Doing Business, is estimated at 21% GDP in 2012.

The methods used differ in the coverage of the shadow economy, both in terms of the institutional sectors, forms of shadow economy and the methodology used. The MIMIC method has the broadest coverage, since it covers all institutional sectors and all forms of the shadow economy. The HTC method estimates only those forms of the shadow economy that can be identified and estimated on the basis of household income and consumption data. The Survey was used to estimate the most important forms of the shadow economy among enterprises.

For analyses in that work we use the MIMIC methodology. For that point, in order to briefly describe the MIMIC methodology (multiple indicators-multiple causes), one starts from the idea that shadow economy effects show up simultaneously in the production, labour, and money markets (Schneider et al, 2010b, pp. 48). The methodology supposes taking account of several causes that determine the existence and size of an underground economy and its effects over time. According to the methodology, underground economy is defined by a latent variable (not directly noticeable which is why it is also called unobserved variable) being part of functional relationships where the other variables are observed (measured). Observed variables in these functional relationships are causal (explanatory) variables and indicators. The MIMIC model consists of two parts: the structural equation model and the measurement model. The structural equation expresses by a linear regression relationship a latent variable according to causal variables. The measurement model is made up of several linear regression equations where the indicators are expressed according to the latent variable.

The way to measure the size of the underground economy requires several stages which are described in the following (Schneider et al, 2010b). The first stage is the statistical analysis of relationships among latent variable – causal variables and indicators latent variable. After having identified equations and estimated the parameters, the MIMIC index is calculated according to the results provided by the model. The analysis supplies only relative, not absolute

estimations of the underground economy size. Therefore it is necessary to have a calibration (benchmarking) procedure to calculate the absolute values of the underground economy size.

The MIMIC method generally applies to a large sample of countries and during several years. Causal variables may be, for example: fiscal freedom, business freedom, economic freedom index (all the three indices are calculated by Heritage Foundation), direct taxes as a proportion of total overall taxation, indirect taxes as a proportion of total overall taxation, general government final consumption expenditures as a percentage of the GDP, Government Effectiveness (from the Worldwide Governance Indicators), rate of unemployment, GDP per capita, inflation rate etc. Among indicators, there are: GDP per capita, growth rate of GDP per capita, rate of labour force participation, growth index of labour force participation etc. The method used by Schneider in his surveys over the last years is MIMIC. Besides, the most frequent methods used to measure the size of underground economy are MIMIC and DYMIMIC.

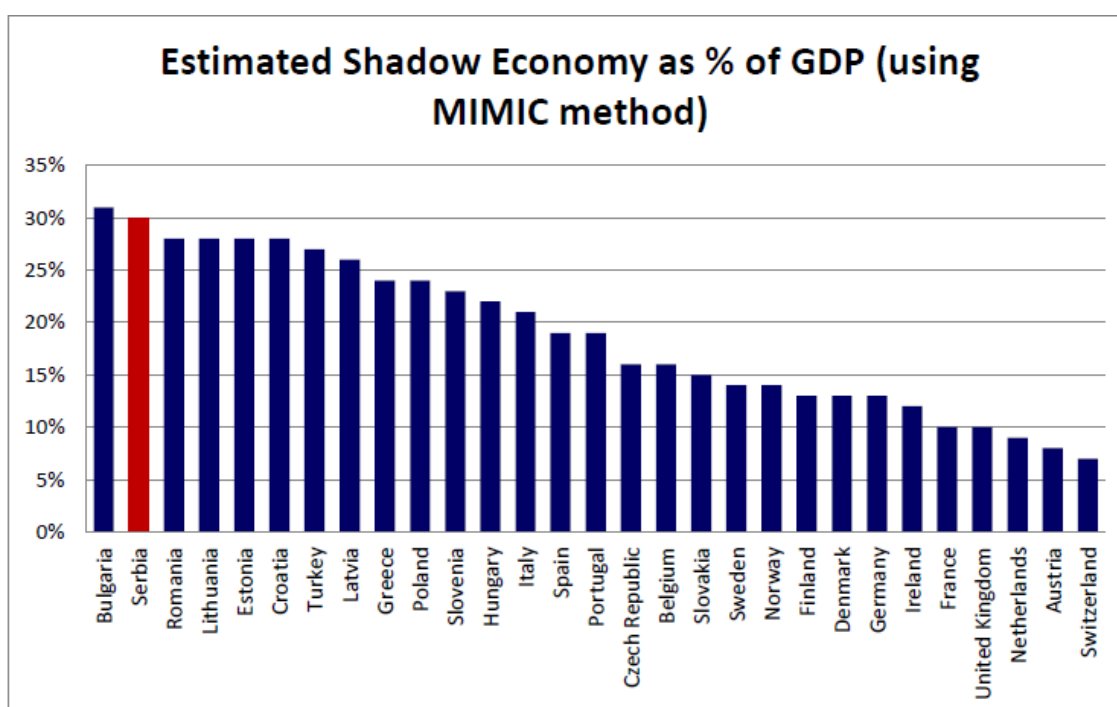


Figure 3.: Estimated Scope of Shadow Economy in European Countries  
(source: European Commission and FAE (2013))

The shadow economy in the Republic of Serbia, using the MIMIC method for calculation, stands at around 30% GDP, placing Serbia in the category of countries with a high level of tax evasion (the average for countries in the region is between 22-33% of GDP, while for Western European countries it stood at 15% participation of informal sector within GDP).

The findings of the MIMIC method applied to Serbia and the other ten Central and Eastern European countries show that the effect of the shadow economy on registered GDP is statistically highly significant and has the expected negative sign: if GDP per capita falls by one percentage point, the shadow economy will increase by between 0.6 and 0.7 percentage points, depending on the model used. This means that any future decline in the GDP will increase pressure on the shadow economy, since business entities will endeavour to compensate for fewer opportunities to operate in the formal sector by shifting into the shadow economy. This finding underlines the importance of preserving macroeconomic stability and creating

conditions for growth in the future, which will serve as a major component of a successful strategy for formalising the shadow economy.

With higher levels of tax burden and social insurance contributions, excess administration barriers for doing business, high unemployment rates and low level of economic development- the quality of state institutions and public sector services is deteriorating, citizens exhibit more tolerant behavior and attitude towards corruption, while the scope of the shadow economy is enlarged.

### 3.2. City of the Republic of Serbia, according to the Corruption Perceptions Index

Various surveys and studies have been conducted in Serbia in an attempt to provide data and analyses on the extent and nature of corruption. For example, according to repeated UNDP corruption benchmarking surveys carried out by TNS Medium Gallup in recent years (October 2009, March 2010 and October 2010), it appears that the percentage of citizens directly exposed to the payment of bribes has remained quite constant throughout the surveyed periods: the percentage of respondents admitting to having paid a bribe in the three months prior to those surveys was 15 per cent in October 2009, 16 per cent in March 2010 and 13 per cent in October 2010. As figure 1 shows, the results of those surveys indicate that most bribes were paid to doctors (57% of the bribes paid), followed by police officers (26%) and state administration employees (13%). In addition to the experience of bribery, additional insights can be derived from investigating citizens' perception about corruption: for example according to Transparency International's Global Corruption Barometer Report 2013, a large share of Serbian citizens (49%) feel that the level of corruption has increased in the last 3 years.

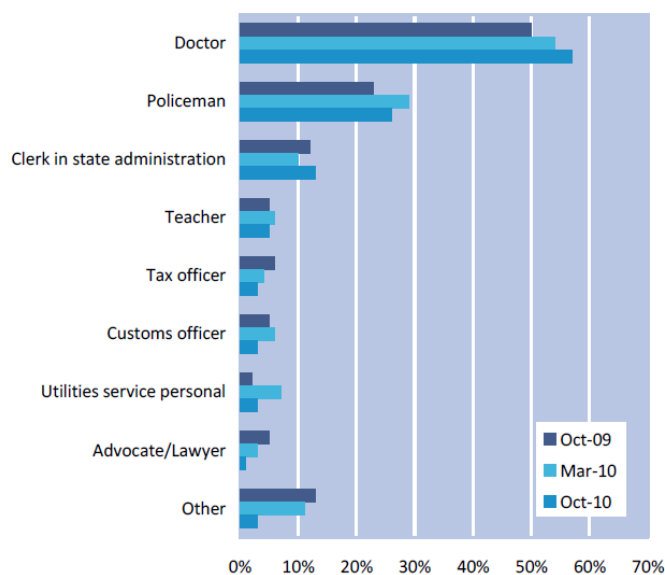


Figure 4.: Percentage of bribe-payers who paid to selected types of officials, Serbia; October 2009, March 2010, October 2010

(Source: UNDP and TNS Medium Gallup, Serbia Corruption Benchmarking Survey, 2010)

In 2012 methodology for calculating the index was changed, and instead of recent scoring from 0 to 10, scoring from 0 to 100 is introduced. Results from 2011 still cannot be comparable by simple multiplying with 10, due to difference in methodology, but it is still possible to compare ranking on the table and standings compared to other countries. Here is how the Index and standings of Serbia, that is SRJ and SCG, changed from 2000 till today:

Year	2000	2003	2004	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Score	1,3	2,3	2,7	3,0	3,4	3,4	3,5	3,5	3,3	39	42	41	40
Ranking/ total number of countries	89/ 90	106/ 133	97/ 145	90/ 163	79/ 179	85/ 180	83/ 180	78/ 178	86/ 183	80/ 176	72/ 177	78/ 175	71/ 168

Table 4. /  
Table 5. Ranking of countries:

Rank	Country / Territory	Score 2013	Score 2014	Score 2015 (changes in ranking)
35	Slovenia	57	58	60 (+4)
50	Croatia	48	48	51 (+11)
58	Romania	43	43	46 (+11)
61	Montenegro	44	42	44 (+15)
66	Macedonia	44	45	42 (-3)
69	Bulgaria	41	43	41 (0)
71	Serbia	42	41	40 (+7)
76	B&H	42	39	38 (+4)
88	Albania	31	33	36 (+22)
103	Kosovo	33	33	33 (+7)

If we looked for 2015., second year in a row, Serbia has made a mild downfall in the Transparency International's Corruption Perception Index ranking. With the score of 40, on a scale from 100 to 0, this year Serbia takes 71st position on a list of 168 states (last year its score was 41, ranked as 78th, but the number of countries included in a list was higher - 175). This result still places Serbia among countries with widespread corruption, the same as in previous 15 years. Progress in ranking in the past two years was not the beginning of the positive trend (2013 Index rose from 39 to 42), but more of a reflection of perception based on the promises and expectations. Systemic measures for preventing corruption were not implemented or that was being done with delay and in scope far less than necessary, result, for now, is unrecognizable. In a situation when repressive activities in fight against corruption, highly exploited by the media, don't have court epilogue, and at the same time preventive acting is missing or is delayed, stagnation on the list of corruption perception is no surprise. Index is created on the basis of estimation of experts, representatives of institutions and businessmen, from the researches implemented by international organizations. Non-transparency in the process of decision making, as well as refusing and hesitation of supreme authority organs to publish certain documents even if they violate the Law on Free Access to Information, contribute to creating of corruption perception.

Making exceptions in implementing procedures creates similar effect – e. g. absence of competition for closing of contracts of large value, implementation of international agreements instead of domestic Public Procurement Law and the Law on Public - Private Partnership.

#### 4. CONCLUSION

The spread of grey economy, tax evasion, and corruption is still a problem in Serbia as a future EU member state with not only domestic but also international implications. Serious obstacles still exist in the country in respect of infrastructures renewal (e.g. in transport, water, and waste management); bureaucracy and ineffective law enforcement; unfavorable demographic trends and emigration of professionals; inflexible labor market; various environmental problems. Achievement of better results in combating corruption is unlikely without sustained efforts in the finalization of structural and institutional reforms. Moreover, in the framework of the adopted EU legislation and transparency requirements, the enforcement of anti-corruption measures becomes much more important for the current Serbian public policy. This necessitates additional comprehensive investigation of the options for implementation of potentially effective tools that will be able to restrain, as much as possible, the extent of grey economy operations and induce a higher degree of societal intolerance to corruption, fraudulent behavior, and tax evasion. In this work we tried to give a small contribution in terms of pointing out the necessity, the reforms in the direction of public administration reform, work of inspections, as well as the system for issuing permits, that could have long term consequences to business surroundings and decreasing of corruption perception. However, it is necessary to bear in mind that even when such reforms is implemented completely, which is still not the case, changing of perception takes time.

The policy of reducing the gray economy and corruption, which have been found to be mutually complementary rather than exclusive, includes several components: (1) general reforms, through the creation of a favorable environment for business in the formal sector, influence the reduction of gray economy and corruption; (2) incentive measures directly aimed at the gray economy and corruption, and (3) strengthening the administrative capacity of the country.

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## KNOWLEDGE SHARING IN VIRTUAL ORGANIZATIONS

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### **ABSTRACT**

*The traditional concept of the organization has been increasingly orienting towards the 'virtual organization'. The value and effectiveness of the human-technology partnership which is manifested in the virtual forms of business is accepted as an economically viable way of doing business. The concept of such an organization is based on the knowledge, especially that which is deposited in the minds of talented individuals, known as tacit knowledge. Knowledge organisations are more likely to adapt to the virtual forms of business, in comparison to the ones neglecting this aspect. Successful virtual management is reflected in the ability to create knowledge management systems to harness the intellectual capital and create value. A new form of association is relying on people and virtual work can only be realized if team leaders and team members are motivated to share their unique knowledge with each other.*

*However, virtual organisations are usually short-lived (lasting until the end of the set business objectives) and the people who are involved in virtual social networks do not have enough time to realize the mutual connection of trust and experience, so there is concern that such a network does not lead to the exchange of knowledge, experiences and beliefs.*

**Keywords:** *Knowledge, Management, Organization, Virtual*

### **1. INTRODUCTION**

The modern economy is directed more towards knowledge and latest technologies. The idea of the new organisation argued that "... bound to investigate and explain the causes and consequences of these changes in order to understand that a major transformation is due to the introduction of new economic organisation" (Fukuyama, 2007, p.57). Only those companies that embrace knowledge as the most important resource can expect to be better positioned than the competition because "knowledge is a strategic resource that gives them sustainable competitive advantage" (Drucker, 1993).

There are two basic types of knowledge: explicit and tacit (Edvinsson and Malone, 1997). The concept of 'intelligent organisation' is based primarily on knowledge that is deposited in the minds of talented individuals. Such knowledge, in the theory, is called tacit knowledge, which "cannot be bought in the market in a form that would be appropriate for direct use" (Zack, 1999, p.128).

The transfer of tacit knowledge requires a certain amount of confidence and contacts. „In this 'socialization' process, the tacit background is provided by the socially shared meaning structure, built through a social and cultural process that is internalized by the members of the society during their cognitive and social development" (Tuomi, 1999-2000, p.111).

Such an approach requires a new form of organisation that is facing the intellectual capital. Reconciliation of businesses with the challenges of the modern era increasingly indicates interaction with the progress of science and technology. Interconnection of information and knowledge sharing is resulting from environment interactions.

Learning and adapting to new communication and business methods is increasingly directed towards virtual communication, and thus to the creation of virtual organisations. Smart organisations, which are based on knowledge and continuing education of employees, are more likely to adapt to the virtual forms of business, in comparison to the ones neglecting this aspect.

But, if the virtual model of communication is not properly understood, or if there is a wrong message accepted, the main thread of communication may be impaired stress acceptance or rejection of the second communicator. Aspects of virtuality occur in many business enterprises. Rapid advancements in telecommunication technologies have enabled more telecommuting and cooperation among physically distributed employees (Barner, 1996). These trends suggest that firms are acquiring more virtual characteristics than in the past. Even firms that may not look virtually organized on the surface are performing selected activities and processes virtually. Regardless of the type of the organisational form, today's business world must be the organisation of human interest and their work motivation, because without good results in this area business success and competitive advantage are reduced. Employee motivation contributes to the improvement of efficiency, effectiveness, creativity and quality of the work, as well as to the improvement in the quality of the working environment.

Virtual professional teams are consisting of self-motivated people with a collective vision, enabled by technology to collaborate in achieving a common goal – an innovation – by sharing ideas, information, and work product development, within not just any organisational work process; but a process highly dependent on creativity (Brown & Eisenhardt, 1995).

## **2. TWO TYPES OF KNOWLEDGE**

Successful management is reflected in the ability for creating knowledge management systems to harness intellectual capital and create value. As we have already noted, there are two types of knowledge: explicit and tacit. Knowledge management systems must be structured especially to capture tacit knowledge. Tacit knowledge cannot be easily channeled because it requires deliberate cooperation of the individual in possession of such knowledge. "The value of capturing tacit knowledge should not be underestimated. Having access to knowledge only when its 'owner' has time to share it or losing it entirely if the employee leaves the company are significant problems that threaten the value of the organisation's knowledge capital" (Davenport & Prusak, 1998, p. 81).

Tacit knowledge is learning by doing, but such knowledge remains deposited in the consciousness of an individual if there is no motivation for sharing knowledge. To realize tacit knowledge we must first concentrate on defining the two types of knowledge as potential resources within the organization.

*Figure following on the next page*

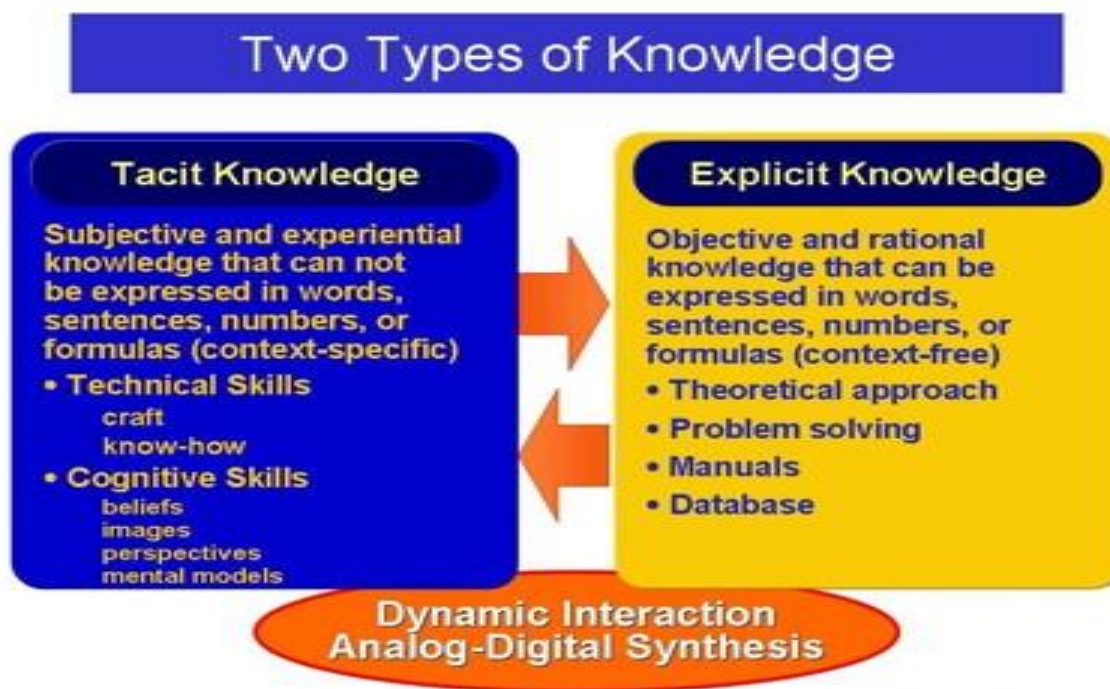


Figure 1. Two types of knowledge (APO, 2016)

From the figure 1. we can see differences between two types of knowledge. Tacit knowledge according Gourlay is a form of knowledge that is highly personal and context specific and deeply rooted in individual experiences, ideas, values and emotions it is internally processed, and is embodied in one's self (Gourlay, 2002). Such kind of knowledge is important as the source of competitive advantage. The term 'tacit knowing' or 'tacit knowledge' was first introduced into philosophy by Michael Polanyi (Polanyi, 1966).

Tacit knowledge is based on skills which can be grouped into two units. This is subjective knowledge acquired thanks to many years of business experience. It's like a special craft that allows the owner to work in the best way that is known only to him. This kind of hidden capital is deposited in the minds of talented individuals and can be viewed only as a potential capital of the organization.

Tacit knowledge cannot easily be channeled as it requires a conscious and voluntary cooperation of individuals who have such knowledge. In that knowledge lies the largest competitive power of the organization. However, such knowledge is extremely difficult to get, and tacit knowledge is a part of one's inner world, belonging exclusively to an individual. This kind of knowledge is not visible to other people (Baltezarevic et al., 2014, p.42).

In contrary, explicit knowledge means that someone has explicit knowledge of something if a statement of it can be elicited from him by suitable enquiry or prompting and it can be expressed and communicated linguistically (Dummett, 1991). Duckworth, written down, expressed in numbers, formulas and it is easy for humans to communicate. It is evident knowledge deposited within the Know How and available to all members of the organization.

Explicit knowledge is selectively collected from internal and external sources to improve overall knowledge of the organization. This knowledge guarantees the individuals, at all levels of the organization, access to the information they need to perform tasks contributing to the fulfillment of the overall objectives of the organization. The flow of information allows

effective use of intellectual capital in a business context. Explicit knowledge improves connecting people and sharing ideas, so collective action becomes almost instinctive part of daily work. It binds also behavior modification to meet the specific knowledge and vision. Knowledge is spread through personal communication, phone calls or meetings. The values of knowledge and know-how created through this process and guide in the form of various reports. They then become part of the knowledge of the company. The knowledge management objective is to make the best use of the knowledge which is available to an organization. This means a transformation of the hidden knowledge into an open shape of knowledge available for the whole collective through the processes of social interaction and collaboration.

### 3. KNOWLEDGE CREATION

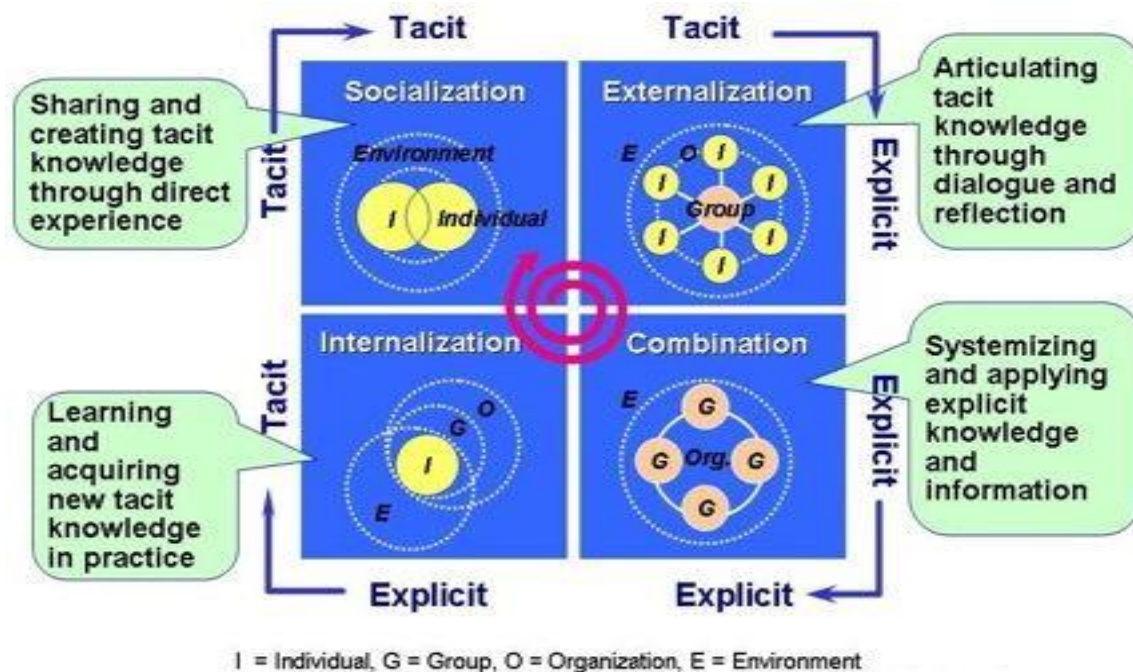


Figure 2. Knowledge creation (APO, 2016)

From the figure 2. we can see principle of interactions between two types of knowledge. As Professor Ikujiro Nonaka pointed out knowledge creation is a spiraling process of interactions between explicit and tacit knowledge which lead to the creation of new knowledge (Nonaka and Konno, 1998). He marked four modes of knowledge conversion: 1) socialization (from tacit knowledge to tacit knowledge); 2) externalization (from tacit knowledge to explicit knowledge); 3) combination (from explicit knowledge to explicit knowledge); and 4) internalization (from explicit knowledge to tacit knowledge).

Socialization means the process of converting new tacit knowledge through interaction with the social group that includes all known ways for the inclusion of an individual in the group, like collaboration both inside the organization and informal events with family members and like.

Externalization is the process of transforming tacit knowledge into explicit knowledge, which then, as a new knowledge, can be shared within the other workers. The combination is the process of converting explicit knowledge into a more complex, systematic set of explicit

knowledge which leads to the creation of new knowledge. Internationalization is the reverse process that allows the explicit knowledge to create the possibility for the formation of new tacit resources. Internalization can mean also learning by doing.

Finally, we can conclude that knowledge creation is a continuous, vice versa process of interactions between tacit and explicit knowledge. The main instrument for acquiring knowledge and its transformation in organizational capital is communication. Communication and organizational cultures together are important for achieving the projected goals of the organization and adapting to change organizational culture, as they encourage adequate participation of workers and the achievement of organizational goals. Good communications stimulate ideas and creativity of employees. However, this can be achieved only in those collectives in whom the management is knowledgeable and applies communication skills that are necessary to establish a two-way communication (Baltezarevic et al., 2014, p.42).

Knowledge transfer and change of experiences and innovative ideas is based on personal relationships. People need a proper social environment in which they feel good because it is a predisposition to accept organizational methods for collecting, storing and disseminating research and experience. People must be aware that they work together to accomplish their personal and collective visions. Only when they are sure that collective accepted them and that their opinions are respected, employees are willing to share their experiences and their personal visions. This is the only possible way for transforming tacit to explicit knowledge and the creation of a new organization value. Exchange and transformation of knowledge requires a continuous process and a stable organizational culture. People must feel safe and must have confidence in each other.

#### **4. HOW TO ORGANIZE KNOWLEDGE SHARING IN VIRTUAL ORGANIZATIONS?**

A networked virtual team is defined by Duarte and Snyder as consisting “of individuals who collaborate to achieve a common goal or purpose” (Duarte & Snyder, 2001, p. 5). Business in the virtual space still carries numerous dilemmas. Work, learn and extent knowledge and ideas into virtual volumes are determined by global space and virtual contacts. In these conditions can occur a problem in contacts between employees such as lack of trust and lack of motivation to share ideas with people they do not know well. This problem can be partly solved by simulating face-to-face contact, for example, organizing video conferences and similar virtual meetings.

Nonetheless, people in so-called virtual teams, still find that collaborative work is most effective when performed in face-to-face meetings where the issue of trust and ambiguity that surrounds identity in the virtual world are more easily overcome (Hildreth et al, 1998). If people don't meet each other in the real space it is difficult for them to achieve a satisfactory level of confidence, which can make collaboration in an online learning community less efficient.

Employees are still not quite ready to give up the conventional forms of communication. Belonging to a group, or a certain collective, apart from security brings also a certain sense of self-evaluation. This phenomenon not only identifies one with a particular group, but also provides the experience that the group bestows some special qualities, thus making one stand out from the others. Organisational communication has to be adaptable and possess the ability

to flexibly respond to the dynamics of changes in the environment as well as the ability to make a positive response to the requirements posed by the environment demands. Regardless of the type of the organisational form, the central question in today's business world is the organisation of human interest and their work motivation, because without good results in this area, our chances of business success and competitive advantage are reduced.

In such an environment, managers must find a way to overcome the communication barriers and to support team members to establish ongoing cooperation and daily exchange of information. Managing virtual teams means managing a whole spectrum of different communication strategies and techniques, as well as managing the human and social processes that nourish and support the esprit de corps that makes a team a team (Kimble, 2011, p. 6). Exchange of knowledge that is necessary for organizational success is only possible when the individual members of the virtual organization are willing to accept the common goals and culture of the organization. The moment of their acceptance is also the moment of their identification with the virtual team. Acceptance of teamwork means that team member recognizes that his personal needs are in accordance with the needs of the team. Most important is to establish a knowledge base of their needs, relationships and opportunities. People will determine organizational success and knowledge must be a systematic process (Skyrme & Amidon, 1997). Knowledge represents the understanding of customers' needs and the business environment as well as the skills and experience of the staff. Employment policies play a central role in this and it means that they need knowledge bank containing useful information and instructions on how to carry out key tasks. Virtual teams managers must overcome the limitations of technology for communication and collaboration. The concretion of social relations within team members refers to the integration of knowledge and its transfer.

## 5. CONCLUSION

Globalization and advances in technology have created a space for communication outside defined geographic boundaries. Limited, 'fenced' space no longer exists. The entire planet has become a 'communicative village', and geographical distance is no longer an insurmountable barrier to the initiation and realization of the 'business without borders'. Managers are increasingly challenged by the abundance of uncertainties and demands in their operating environments that have transformed the fundamental nature of competition.

Knowledge is the competitive value of any system, particularly its intangible part, hidden in the minds of the individuals. In order to transform this knowledge into intellectual property of the organisation, there must exist the willingness of the owners of the hidden capital to share their experience and knowledge with other members of the organisation. This will only happen when the team reaches such a level of understanding and trust that, when led by effective communication, achieves to 'convince' the owner of the capital that he/she is an important and integral part of the organisation.

Knowledge management is a strategic use of collective knowledge of the company and know-how's to creating profits and increase market share. Codification of knowledge is that kind of knowledge representation that allows individuals and organisations to use it again.

Virtual teams pose a number of channels. Establish good information flow and trust between team members as a prerequisite for the successful functioning. Team members will be willing to share ideas, knowledge and experience, not at a beginning of team forming, but when they reach a satisfactory level of trust. Trust is a prerequisite for increases their ability to share and learn from each other.



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## **Enterprise in Turbulent Environment**

## **A RESEARCH ON RAW MATERIAL PROBLEM OF SMALL AND MEDIUM SIZED FURNITURE ENTERPRISES IN MERSIN CITY**

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### **ABSTRACT**

*Raw material is a basic material that is used to produce goods, finished products, energy, or intermediate materials which are feedstock for future finished products. These materials are in their natural form or which have undergone the transformation required to prepare them for internationally marketing in substantial volumes. In other words they have character of bottleneck asset and are highly important in the way of producing other products. Corresponds to a rapid increase in the population of our country, forest products have not shown a parallel increase, the gap between production and consumption is caused by the growth of a little more each year. Moreover forest products as sources of raw materials is used in the furniture industry and some of the this raw material is known inadequate. In this study, it is investigated that raw material problem of small and medium sized enterprises (SMEs) furniture sector in Mersin city. Face to face survey method is used to 120 furniture enterprises. After gathering data, it is analyzed at SPSS software environment. Findings are presented as frequency tables and crosstabs. As a important result 78,3% of enterprises have not stockpile. Inadequacy of capital is found the most important reason of inadequate stockpile as 59,8%. Furthermore raw material supply problem is not seen at 89,2% of these furniture SMEs.*

**Keywords:** *Raw material problem, SMEs, Furniture sector*

### **1. INTRODUCTION**

It is important and necessary for each enterprise to constitute an effective supply chain between the components of chain including supplier, manufacturer, distributor and retailer. Supply chain management has taken a very important and critical role for any company in the increased

globalization and competition in the market. The central aim of supply chain management translates the right products in the right quantities at the right place and right moment and minimum cost into the interrelated issues of customers' satisfaction (Pal, Sana, and Chaudhuri, 2012). Procurement of raw material is one of the main factors in supply chains because more efficient decision on raw materials could provide higher revenue growth.

A raw material is a basic material that is used to produce goods, finished products, energy, or intermediate materials which are feedstock for future finished products. These materials are in their natural form or which have undergone the transformation required to prepare them for internationally marketing in substantial volumes. In other words they have character of bottleneck asset and are highly important in the way of producing other products.

At the beginning of many manufacturing processes, semi-finished products are manufactured from raw materials. Raw material prices are responsible for an increasing portion of total procurement cost (Arnold, Minner and Eidam, 2009).

The characteristics of the raw material vulnerability assessments differ concerning their scope and target and vary with respect to the consideration of economic importance, strategic importance and impact of supply disruption, resulting in varying terms. Helbig et. al. (2016) provided an overview of 18 vulnerability assessments in 16 recent criticality studies and revealed 18 different vulnerability indicators, among which a set of six indicators is frequently used and therefore might be recommended for decision makers.

Hlioui, Gharbi, and Hajji (2015) addressed the simultaneous production, replenishment and raw material quality control problem for the case of a manufacturing-oriented supply chain with a failure-prone transformation stage, random lead time and imperfect delivered lot. Dewulf et. al. (2015) proposed a holistic classification of raw materials and primary energy carriers and a quantitative integrated sustainability assessment framework for the production and supply of raw materials and primary energy carriers, covering all the sustainability pillars.

Chao, Chen, and Zheng (2008) surveyed pricing and replenishment policies for a periodic review inventory system with random supply capacity. Taleizadeh and Noori-daryan (2016) optimized the production-inventory model for raw material by employing optimal pricing, manufacturing and inventory policies in a decentralized supply chain network such that each member tries to optimize own objective function.

Lee (2005) proposed an integrated inventory control model to minimize the mean total cost per unit time of the raw materials ordering and holding, manufacturing setup and the finished goods holding, the buyer's ordering as well as its inventory holding. Sana (2011) employed an integrated production and inventory model in a three-layer supply chain involving a supplier, a manufacturer and a retailer. He studied the effect of production rate, unit production cost, order size of raw material and idle time as business strategies for collaborating marketing system.

Pal, Sana, and Chaudhuri (2012) developed a multi-product inventory model in a supply chain where multiple suppliers, one manufacturer and multiple non-competing retailers are members of the chain. In this chain, each supplier supplies one kind of raw material and a manufacturer needs certain percentage of different kinds of raw materials to produce each product. Zhu (2012) developed the combined pricing and inventory control problem in a random and price-sensitive demand environment with returns and expediting.

Ben-Daya, Asad, and Seliaman (2013) studied the joint economic lot sizing problem in the context of a three-layer supply chain consisting of a single supplier, single manufacturer and multi-retailers for raw material. The authors aimed to identify the timings and quantities of logistics with a holistic view for all parties involved such that the chain-wide total ordering, setup, raw material and finished product inventory holding costs are minimized.

Kingsman (1985) states a similar dynamic program and obtains critical prices indicating optimal inventory coverage. He provides a broad overview about raw materials markets and their peculiarities. Geman (2005) gives another detailed overview about commodities,

commodity derivatives and commodity markets. A common approximation of these contributions is the assumption of discrete time. Focusing on raw materials traded at commodity exchanges, buying opportunities are rather continuous in time and therefore a continuous time planning approach can yield more accurate results as it avoids the determination of the most appropriate period length.

Raw materials such as log, pulp for large-scale or small industries are provided from forests. Raw materials provided from natural resources are incorporated in the eventual output and may be considerably modified during the course of manufacture. These raw materials flow into the processing chains which link the resource to the final consumers of outputs from the forest. In relation to wood processing, forests are regarded as resources because they are the source of raw materials for primary processing plants such as sawmills. Concern to provide an uninterrupted supply of raw material from the forest underlies the principle of sustained yield, as developed by foresters during the eighteenth and nineteenth centuries. The ability of the forest to provide a continuous flow of raw materials depends on the rate of renewal of the resource and the rate of harvesting. Forest industries need supplies of raw materials, capital and human resources to expand and develop (Gane, 2007).

## 2. MATERIAL AND METHOD

Furniture industry is a part of secondary manufacturing that is one of the six subsectors of forestry. The characteristics of this secondary manufacturing type are private ownership, production purpose, design and manufacture activities. These manufacturers usually use sawn timber and panel products as raw material and its outputs are household and office furniture (Gane, 2007).

The material of this study is small and middle sized furniture firms of Mersin city, Turkey. The industry structure of Mersin consists of food sector (36%), forest products sector (10%), metal sector (10%) and plastic sector (8%). This city is among industrial developed cities in Turkey. There are 1139 industrial firms, being still active. Number of furniture manufacturers is 35, with industrial registry certificate, ranked from small to large-sized firms (URL-1).

A questionnaire survey was used to obtain data. Face-to-face method was used to 120 furniture enterprises. This survey form is consisted of raw material procurement questions. To analyze obtained data, the authors used descriptive statistics and crosstabs in Statistical Package for the Social Sciences (SPSS) software.

## 3. RESULTS

According to Table 1., 89,2% of small and medium sized furniture enterprises don't have any problem about raw material procurement. The type of legal enterprise status which has most bother at raw material procurement is furniture corporations about 25%.

Table 1. The problem of raw material procurement (%)

Legal status of enterprise	Yes	No
Proprietorship	10,2	89,8
Corporation	25,0	75,0
Limited company	10,7	89,3
Total	10,8	89,2

It has been showed in Table 2. that 78,3% of furniture firms don't stock raw material. The corporations and limited companies need stockpile in proportion to 75% and 42,9%, respectively.

Table 2. The stockpile status of enterprises

Legal status of enterprise	Yes	No
Proprietorship	12,5	87,5
Corporation	75,0	25,0
Limited company	42,9	57,1
Total	21,7	78,3

The reasons of inadequate stockpile at furniture enterprises is shown at Table 3. 59,8% of enterprises has inadequacy of capital, 20,6% of enterprises has lack of area for stockpile, 18,5% of enterprises has other reasons, and 1,1% of enterprises has lack of raw material for stockpile about inadequate stockpile problem. Besides all of corporations at furniture industry stated that they have inadequate area for stockpile. Inadequacy of capital is biggest reason for inadequate stockpile because 61% of proprietorships and 57,1% of limited companies has troubles about capital.

Table 3. The reason of inadequate stockpile at furniture enterprises

Legal status of enterprise	Inadequacy of capital	Lack of raw material for stockpile	Lack of area for stockpile	Other
Proprietorship	61,0	1,3	16,9	20,8
Corporation	-	-	100,0	-
Limited company	57,1		35,8	7,1
Total	59,8	1,1	20,6	18,5

#### 4. CONSLUSION

We investigated raw material procurement and stockpile at small and medium sized furniture manufacturers in Mersin city of Turkey. These enterprises generally don't have troubles about raw material procurement. Furthermore they couldn't make raw material stock in their warehouses. The underlying reasons of this are inadequacy of capital, lack of area for stockpile, lack of raw material for stockpile etc.

Product prices for small enterprises are important on raw material supplier assessments because of getting low enterprise capital. The number of worker, more and more, the importance of paid attention factors at supplier firm choice increase gradually. Because of this, when the enterprises grow, education situations of purchasing department staff are increased and they get an effective role in enterprises. The furniture enterprises tend expensive materials towards raw material stocking when the products are delivered lately from supplier firms. As a result, the cost of doing unnecessary stock can reach disturbing size.

There are obligations that the enterprises minimize the cost for competing in national and international market by using their raw material resources with the most economic method and produce quality, low price product and service for the continuous satisfaction of customers.

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## RELATIONSHIP DEVELOPMENT VIA SOCIAL MEDIA: PURE-PLAY FASHION RETAIL CASES - BUILDING ECONOMIC VALUE FOR THE SMALL FIRM

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### ABSTRACT

*This study explores the relationship generation process for e-SMEs (online small-medium sized enterprises) employing social media in the UK retail fashion industry. It identifies the resultant positive impact derived from effective relationship management in online social space in the pursuit of business continuity. A qualitative case methodology using in-depth interviews reflects an ontological and epistemological perspective of a socially constructed reality. Commercial participants with extensive time and experience in the field provide multiple voices to comprehend relationship phenomena in the social media context. Rich data is analysed via thematic coding and understanding is built via data saturation. Findings identify that a relationship generation process based on four focal aspects results in seven positive impacts for the firm. Effective social media strategy may increase enterprise survival capacity, boost customer acquisition and retention, plus - assist online competitiveness. Ultimately, avoidance of the technology desert will assist in the survival of the smaller-sized firm in an increasingly competitive and aggressive retail environment. The paper concludes that communicating via social media will become increasingly important in the pursuit of customer acquisition, retention and effective relationship building as consumers continue to migrate online.*

**Keywords:** Online SME fashion retailing, Relationship building, Social media marketing

### 1. INTRODUCTION AND RESEARCH OBJECTIVES

Over 1.55 billion active global consumers (Facebook, 2015) currently engage on Facebook for commercial, leisure and social purposes each month. Such rapid consumer migration (Tsimonis & Dimitriadis, 2014) is driving many organisations to intensify employment of new internet-based technology in order to make digital marketing activities more effective and appealing since traditional websites and static content no longer motivate repeat traffic (Sicilia & Palazon, 2008; Rohm *et al.*, 2013; Blasco-Arcas *et al.*, 2014), thus threatening the economic survival of the small firm. Social media empowers the consumer to be an active participant online and potentially reinforces network effects, yet few smaller-sized organisations (SMEs) in general, and small retailers in particular, have adopted effective and sustained social media strategies. This is despite the fact that effective social media strategies are likely to assist in differentiation and enhance customer relationships (Jones *et al.*, 2015) leading to positive economic benefits for the firm. Overall, there is a sustained lack of academic understanding of this phenomenon from the enterprise perspective (Hopkins, 2012; Schultz & Peltier, 2013; Tsimonis & Dimitriadis, 2014). Research into small business use of the internet, and specifically social media, remains in an embryonic state (Jung *et al.*, 2013). In particular, there is a distinct lack of research in the context of pure-play organisations (i.e. those operating exclusively online). In-depth research is now required in this area. The research objectives of this study thus aim to:

- i) Examine the relationship generation process for pure-play SMEs employing social media in the UK retail fashion industry.
- ii) Explore the effect of social media engagement on the nature (strength) of relationship-ties between consumers and pure-play SMEs.

- iii) Identify the positive impact derived from effective engagement of consumers in online social space.

## 2. SUMMARY OF LITERATURE THEMES

Although innovations in online marketing are becoming an increasingly prominent feature of the marketing mix (Peters *et al.*, 2013; Whiting & Williams, 2013; Tsimonis & Dimitriadis, 2014) most businesses struggle to employ social media effectively within their marketing and communications platforms (Schoen *et al.*, 2013). Small firms in particular lack an effective and strategic approach to social media (McCann & Barlow, 2015). In economic terms, new internet-based technology, such as social media, presents an additional challenge to the resource constraints and marketing capabilities of the firm for smaller-sized companies (Ashworth, 2012). This challenge is set to continue given the pace of change and future evolution towards deeper penetration of social media into the consumer psyche. The risk of getting 'left behind' in the technology desert is a critical aspect linked to the potential for survival and business continuity for the small firm.

Recent findings, however, reveal that adoption of social media may offer both direct and indirect value for the small firm in pursuit of sustainability (Hopkins, 2012; Jones *et al.*, 2015; McCann & Barlow, 2015). The potential opportunities offered by SM have thus put a fresh and more urgent focus on employing effective online marketing communications given the speed of consumer adoption in both the developed and developing worlds. Despite this urgency, research has largely been conducted from the consumer or large enterprise perspective, with a focus on convenience samples and the survey method. Consequently, there remains a distinct lack of in-depth knowledge relating to small business and strategy online (Hopkins, 2012; Eid & El-Gohary, 2013; Pomirleanu *et al.*, 2013; McCann & Barlow, 2015). These knowledge gaps are emphasised in the context of the fashion retail sector generally, and pure-play enterprises in particular. There is therefore much scope for depth research from the practitioner perspective and for studies into specific country settings, such as the UK - which has experienced much stronger consumer penetration of both the internet in general, and SM in particular, than most other economic regions of the world.

Active participation and engagement in e-dialogue is advocated in the online retail context (Ashworth, 2012). However, the literature is clearly divided as to whether social media engagement can result in any positive benefit or sensible relationship development between the firm and the consumer. Recent literature suggests that relationship development is possible via social media (e.g. Jones *et al.*, 2015). Conversely, other researchers suggest that only weak-ties at best are possible via social media communications (e.g. Farquhar & Rowley, 2006; Dyerson *et al.*, 2009; Toral *et al.*, 2009). Smaller-sized retailers (alongside supply and support agencies), now need to understand the parameters for generating and sustaining communications via social media (e.g. Boyd Thomas *et al.*, 2007; Kim & Ko, 2012; Coulter & Roggeveen, 2012; Jones *et al.*, 2015) - that can lead to stronger-tie relationships, differentiation and ultimately, business advantage. Success in this area will enable the sector to secure the diversity of the 'super high-street' and to keep pace with global consumer migration online.

The potential of social media for strategic uses (e.g. Dyerson *et al.*, 2009; Tsimonis & Dimitriadis, 2014) has been identified: for example, in relation to facilitating engagement with customers. However, SMEs typically only deliver very superficial communications, meaning that utilisation of low-level social media will only result in a minimal impact at best. Schultz and Peltier (2013) have questioned whether and how social media can be used to leverage consumer engagement into profitable relationships. Simply focussing on 'likes' or 'views',



rather than engaging and building relationships is perceived as a myopic view which is detrimental to the long term success of a firm (Divoli *et al.*, 2012). Small firms are therefore advised to develop and measure social media activity more strategically (McCann *et al.*, 2015).

Recent research (e.g. Blasco-Arcas *et al.*, 2014) emphasizes that co-creation in virtual platforms leads to increased purchase intention/behaviour and may assist in long-term relationship development leading to optimisation of the business. Consumer research suggests social presence exerts strong and positive impacts on website credibility (Toufaily *et al.*, 2013) which has obvious implications for retail. However, the impact of social media in the context of pure-play retail has yet to be examined. Given that the role of social presence is even more important in the case of pure-play retailers (Toufaily *et al.*, 2013), as they do not possess the high street presence to 'legitimise' their business, further research is essential.

Overall, the question of whether and how social media may be used to leverage consumer engagement into profitable relationships has yet to be fully explored (Schultz and Pettier, 2013). This is important since a limited right to content creation is likely to prevent relationships from forming (Tikkanen *et al.*, 2009). Forming only weak relationships is likely to directly impact on brand equity and integrity, thus impacting negatively on future commercialisation opportunities. Consequently, more research is required (Erdoğan & Çiçek, 2012).

### 3. RESEARCH METHODS

This study adopts a qualitative case methodology using in-depth interviews. It reflects an ontological and epistemological perspective of a socially constructed reality. An inductive approach via guided interviews with eight cases is used to generate rich, qualitative data (Creswell & Miller, 2000) as case studies are most useful in the context of SM research (Urquhart & Vaast, 2012). Commercial participants with extensive time and experience in the field provide multiple voices to comprehend relationship phenomena in the social media context (Gergen, 2015).

Since previous research on social media strategy from a management perspective in general, and the fashion retail sector in particular, is limited - it was important to adopt an approach that would provide in-depth insights, and be flexible and exploratory in order to fully examine industry phenomena. Depth interviews are employed as they offer reliable evidence in management research (McCracken, 1988). Adopting a high-interest stakeholder perspective through the purposive selection of e-retail owner-managers (4) and social media agency directors (4) handling over forty fashion clients ensured a sample of credible native speakers (Johnson & Weller, 2002). Harnessing this experience-base ensured that participants had sufficient time in the field to be useful sites for learning (Eisenhardt, 1989). McCracken (1998) suggests eight interviews are sufficient to generate understanding in social research.

To facilitate the research process - recordings were transcribed and stored electronically. Interview data is also supported by field data; in that cases were tracked for several months to establish social media activity. Research notes and observations were also documented and checked against the firm's current SM activity - to ensure both consistency and clarity of empirical data. Rich data was analysed using thematic coding (King, 1998) and understanding generated through data saturation across cases.

This study is limited by the UK context, the single industry focus and the number of case companies sampled. The limitations, however, are counter-balanced by the rich experience base

of participants, and given the UK is leading the field internationally in terms of social media adoption and internet retailing, the context herein presents a useful platform for learning.

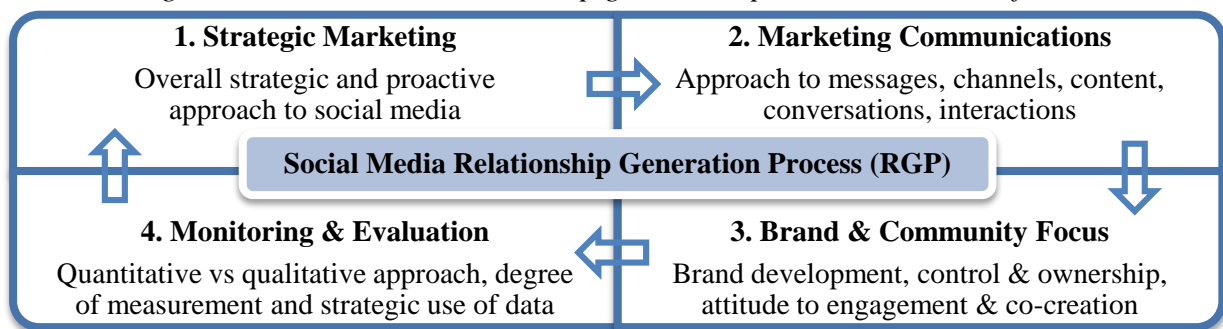
#### 4. RESULTS AND DISCUSSION

The study set out to examine the relationship generation process for pure-play SMEs employing social media in the UK retail industry, explore the nature of relationship-ties and identify the positive impact derived from effective engagement of consumers in online social space from a new perspective, namely that of pure-play fashion retailers.

##### 4.1 Relationship generation process (RGP) and relationship ties

The literature review identifies there has been little research into social media strategy from the management, small firm and retail perspectives. In addressing the knowledge gap, this research identifies four focal aspects critical to relationship generation in the social media context. The four aspects (Figure 1) include the strategic marketing focus of the firm, its approach to marketing communications, brand and community and the nature of monitoring and evaluation.

Figure 1 Social media relationship generation process in the small firm



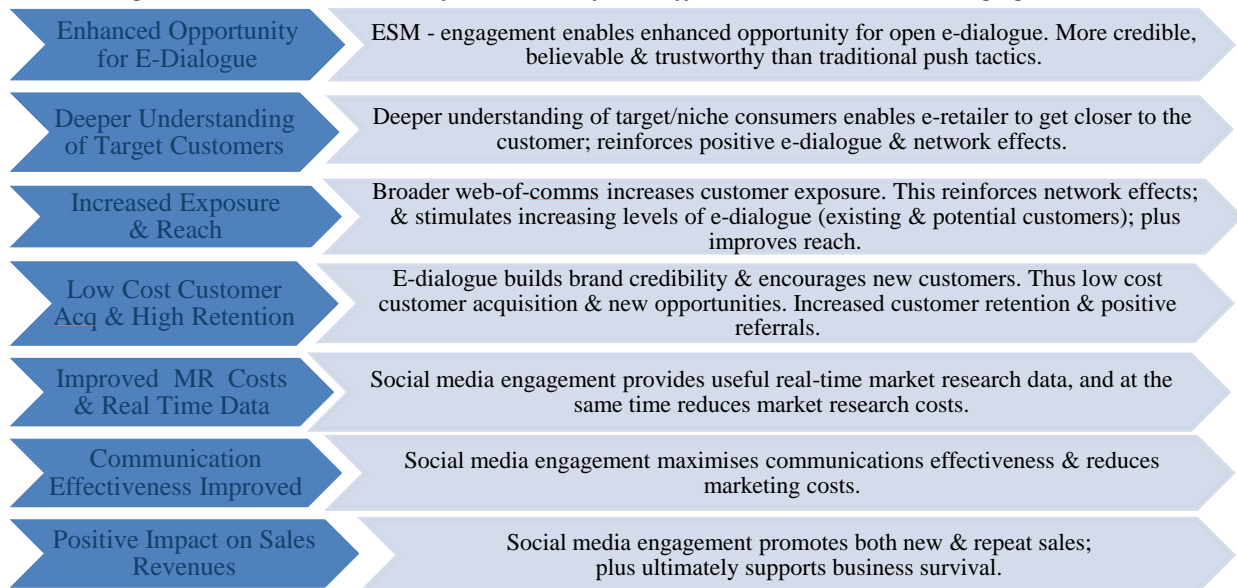
Understanding the overall strategic marketing approach for enterprises successfully generating relationships via social media involves a pull and relationship-oriented strategy that actively draws customers in, encourages open triadic communications (B2C, C2C and C2B) and avoids the hard sell approach. Marketing communications are open, highly customer-focussed and directed towards encouraging dialogue in social space, rather than being uni-directional from the host firm. The brand and community focus is a flexible approach based on co-creation and community understanding. Monitoring and evaluation are based on data mining qualitative e-dialogue and utilising this as the basis of rich market research to feed the relationship generation process and draw customers deeper into the relationship cycle based on clear preferences and needs. The four aspects of the RGP should not be viewed as stand-alone activities that operate independently – rather they should be treated as an integrated, cyclical process that is mutually reinforcing over time.

The findings herein support previous research (e.g. Boyd Thomas *et al.*, 2007; Kim & Ko, 2012) in that communication via social media can create communal bonds between consumers and the firm in the context of brand support/defence. Pure-player retailers and support agencies both clearly identify that stronger-tie relationships are secured in the e-retail setting, rather than the weak-ties stressed in the extant literature earlier. Active participation and engagement in e-dialogue lead to more durable communal bonds and thus offer a potential source of advantage to the small enterprise (Ashworth 2012). The findings herein add a new practitioner voice to support the growing view that advocates the relationship opportunities social media may provide, based on a new context, namely pure-play retailing.

#### 4.2 Positive impact derived from effective engagement in social media

Participants were in clear agreement that engagement in social media (ESM) led to considerable benefits for the firm. Seven core benefits were identified, as highlighted in Figure 2.

*Figure 2 Seven core benefits derived from effective social media engagement*



Overall, and in line with the RGP (Figure 1), the benefits identified above are recognised to be both cumulative and mutually reinforcing. Whilst Figure 2 appears linear for presentation purposes, the effects are more cyclical in nature and iterative in that a deeper understanding of customers leads to stronger relationships and better more tailored communications. In turn, this has a positive economic impact – in that improved sales result, along with positive word-of-mouth, high levels of customer referrals and low levels of customer churn. Low customer acquisition costs achieved via this positive word of mouth enable marketing budgets to be spent more creatively on customer retention strategies rather than on the constant quest for new customers, bringing considerable advantage to the small firm. A focus on social media interventions thus enables the firm to operate in a cycle of success based on real time data and clearly identifiable customer needs and preferences. What is interesting here is that the SMEs in this sample are far more strategically motivated and market oriented than would traditionally be expected (McCann & Barlow, 2015) of a small firm.

#### 5. IMPLICATIONS AND CONCLUSION

As the findings demonstrate, there are considerable perceived and real advantages to be gained by firms implementing an effective social media strategy. Results show the marketing, brand and communications strategy are open and pull based. This serves to engage rather than repel customers by avoiding the hard sell and heavily moderated/closed approach to online communications. This openness and trust given to consumers engaging online has a direct impact on the opportunity for interactivity, which in turn has a positive knock-on effect with both relationship-ties and community engagement. Employing an open and triadic system of communications maximises positive noise in the marketplace and provides the firm with the flexibility, agility and variety of communications to effectively engage customers over the longer term. This approach has the benefit of maximising traffic and engagement, building brand advocacy and strengthening relationship ties. The relationship generation process identified herein offers better opportunities for customer acquisition and retention, whilst maximising cross and up-selling for the small firm. This also encourages further investment in

social media strategy by the firm leading to a cycle of success embedded in the organisation. The approach to social media adopted by the pure-play SME fashion retailers illustrates the powerful potential of social media strategies to promote the success and sustainability of a business in terms of relationship generation and in maximising the value of the brand. The findings herein support the developing social media literature (e.g. Boyd Thomas *et al.*, 2007; Coulter & Roggeveen, 2012) in that communication via social media can create communal bonds and stronger relationship ties. This is consistent with the online consumer behaviour literature which suggests that consumers are more willing to shop online with brands they feel they can trust. In conclusion, the case of SME fashion e-retailers who are highly social media active demonstrates the value of facilitating triadic communications and co-creative activities around a brand in pursuit of stronger-tie relationships, enterprise growth and sustainability via the new relationship generation process. In all, the findings support seven key benefits for the firm resulting from effective social media strategy. Given the global trend towards migration of consumers to SM platforms, all enterprises will now need to consider the role of their social media strategy as an element of their defence against competition and for building protective/durable barriers and generating stronger relationships in social space. As a word of caution, enterprises must strive to strike an appropriate balance between revenue generation and brand building through their social media and web presence via clear strategic direction driven through research and understanding of customer responses to marketing initiatives via an iterative process of continuous improvement.

## 6. FUTURE RESEARCH

There remains considerable potential for future research in the social media domain. Future research should explore the relationship generation process and seven core benefits identified in Figures 1 and 2 across a wider variety of retail enterprises. Investigation of the impact of social media on portfolio and in particular e-portfolio (i.e. multiple website) retailers would now be useful to develop both the small firm and cyber-entrepreneurship literatures. Research to evaluate the process and impacts of effective social media strategies on large versus small retailers and growth versus comfort-zone enterprises would shed greater light on the e-retail communications debate across wider retail and organisational typologies. Cross-cultural and cross-sectoral research to examine these social media phenomena across developed and developing countries will add a useful contribution to the knowledge base. As a final note here, it would also be interesting to explore whether retailers in rapidly developing nations follow the same development pathway as UK companies.

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## CONCEIVING A MARKETING STRATEGY IN THE ERA OF DYNAMIC CAPABILITIES

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### ABSTRACT

*Dynamic capabilities are the processes managers use to modify their organisation in order to 'keep in touch' with changes occurring in their industrial setting. This paper contributes by informing strategic marketing academics and practitioners about the potential implications the era of dynamic capabilities has on marketing strategy formulation and implementation, otherwise known in practice as the SOSTAC process. This paper advocates strategic marketing should be an incessant, habitual, entrepreneurial opportunity sensing managerial skill which is incremental in nature allowing firms to adapt to or even drive industrial change through tactical flexibility, trial and reflective learning with the relentless monitoring of actions taken.*

**Keywords:** Marketing Strategy, Dynamic Capabilities

### 1. INTRODUCTION

For a number of years the practice of strategic marketing planning has followed a SOSTAC type process or variants similar to it i.e. Johnson and Scholes (1988) strategic analysis, strategic choice and strategic implementation. SOCTAC is an acronym introduced by Smith (1993) to aid the creation of strategic plans. The *aide mémoire* is a linear process which includes the stages of situation analysis, objective setting, strategy, tactics, action and control (figure 1). It is the situation analysis component which promotes planners to investigate, understand, synthesize and model the external environment an organisation resides within as the bases to construct and justify strategies. It is here marketers develop an understanding of customer needs. The integration of marketing to strategic planning has become so ingrained that SOSTAC type metaphors are even central to the new frontier of marketing, digital marketing (see Chaffey *et al.*, 2008).

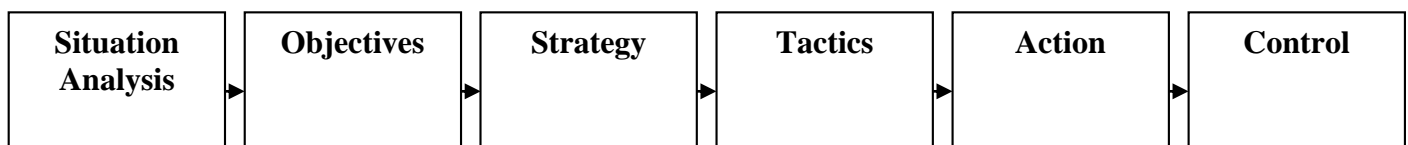


Figure 1  
SOSTAC (Smith, 1993)

In reply to the importance of being responsive to market dynamics, the concept of dynamic capabilities was introduced. Dynamic capabilities represent a firm's ability to 'integrate, build and reconfigure' (Teece *et al.*, 1997) its resources (Eisenhardt and Martin, 2000) and capabilities (Helfat and Peteraf, 2003) to maintain or enhance firm performance in a changing environment. In contrast to original organisational capabilities, dynamic capabilities are described as 'higher order' (Collis, 1994) as they have the supremacy to modify an organisation's assets and capabilities to ensure it has the appropriate resources to respond to or even drive (Eisenhardt and Martin, 2000) shifts within a firm's industrial setting.

Although the new era of dynamic capabilities is gathering pace there has been little offered which ascends such a discussion to strategic marketing practice. Unlike theories on the source of superior firm performance, the SOSTAC process has not evolved in order to take account of the era of industrial dynamism. Instead the process remains a simplistic linear model which, if

not careful, risks becoming a victim of 'strategic wear-out' itself. In order to provide an impact to society, it is important that academic discussion ultimately informs practice. Consequently, the following outlines the potential practical implications the era of dynamic capabilities has on the strategic marketing planning and implementation process.

Like original organisational capabilities, dynamic capabilities are described as 'routines' or 'patterned activity' (Winter, 2003), embedded processes (Eisenhardt and Martin, 2000, p.1106) and 'learned and stable patterns' of behaviour which 'are structured and persistent' (Zollo and Winter, 2002, p.340). Organisations which adapt to external change through a succession of crises are not performing a dynamic capability (Zollo and Winter, 2002). Dynamic capabilities offer an explanation for why firms which face 'Schumpeterian shocks', such as organisations in the I.T. or pharmaceutical industries, maintain superior performance (Teece *et al.*, 1997) or even how some firms are able to instigate 'Schumpeterian shocks' within markets. Examples of dynamic capabilities provided so far include the established processes firms use to develop new products (Marsh and Stock, 2003) and the routines large retailers use to open new outlets in new locations (Winter, 2003).

Studies have endeavoured to illustrate the finer details of the 'routine' like dynamic capability process. As a result, both Zollo and Winter (2002) and Zott (2003) adopt rational choice based evolutionary models. In essence, such models include the stages of variation, selection, and solution retention. The variation stage includes the generation of solutions or ideas by managers to tackle, or solve new problems which have occurred. The solutions generated within the variation stage are then evaluated in the selection stage. It is the solution with the best 'potential performance implications', or the best 'fitness value' (Zott, 2003, p.106) idea, which is rationally chosen. Once elected the best 'fitness value' solution is implemented within the retention stage.

Further details of the 'routine' managers use to modify a firm's resources have begun to merge as the microfoundations of dynamic capabilities (Teece, 2007). Here the entrepreneurial decision making abilities of managers as well as organisational learning is emphasised. Positioned as the 'new behavioural theory' of the firm (Augier and Teece, 2009), the dynamic capabilities perspective places importance on understanding how managers – regarded as people with limited cognitive ability (Simon, 1947; Cyert and March, 1963) – deal with external change. Within this new era the microfoundations of dynamic capabilities are thought to consist of three distinctive entrepreneurial inspired managerial abilities (Teece, 2007).

The first microfoundation details managers' entrepreneurial ability to sense and recognise opportunities. Here managers scan and monitor a firm's internal and external environments in order to interpret, synthesise and hypothesise about potential opportunities which may exist. The second is managers' ability to seize an opportunity, including activities such as the development of business models, the attainment and commitment of financial resources as well as the selection of assets and capabilities to capitalise on an interpreted opportunity. The third is managers ability to manage threats and constantly reconfigure an organisation's resources to allow it to 'keep in touch' with the market as an opportunity unfolds, including activities such as the modification of an organisation's structure as well as collaborating with third party organisations to pursue and fully capitalise on an envisioned opportunity.

The practice of strategic marketing is informed by the SOSTAC process. Although the new era of dynamic capabilities is gathering pace there has been little offered which ascends such a discussion to strategic marketing practice. Unlike theories on the source of superior firm performance, the SOSTAC process has not evolved in order to take account of the era of industrial dynamism. Instead the process remains a simplistic linear model which, if not careful,



risks becoming a victim of 'strategic wear-out' itself. In order to provide an impact to society, it is important that academic discussion ultimately informs practice. Consequently, the following outlines the potential practical implications the era of dynamic capabilities has on the strategic marketing planning and implementation process.

## **2. SITUATION ANALYSIS: INCESSANT SCANNING AND SYNTHESIS**

In order to formulate a strategy, practitioners first gain an understanding of the environment within which an organisation is situated (Johnson and Scholes, 1988). Comprehensive strategic marketing plans not only consider elements outside of an organisation, such as wider environmental PEST factors and competitor positioning, but also acknowledge the resource based view by modelling the internal mechanisms of an organisation. This thus provides a basis for the 'matching process' advocated by Penrose (1959) and Andrews (1971). In practice, situation analysis equates to the gathering and synthesis of internal and external information. This information is used to model the dynamics of the external and internal environments of a firm as well as identify opportunities.

The task of modelling of an organisation's internal and external dynamics is the basis in which managers make strategic decisions. Yet the frequency in which such modelling takes places is rarely discussed. Under the new era of industrial dynamism, the task of modelling an organisation's internal and external dynamics is required to be done so incessantly, to the point that the activity becomes a semi automatic skill like routine. By simply modelling an organisation's internal and external dynamics at a single point in time, managers risk missing changes and/or shifts which occur within time. In turn they thus risk 'falling out of touch' with the dynamics of the environment their organisation resides within. Consequently, within the new era of dynamic capabilities managers are required to carry mental models of the dynamics of their organisation's internal and external environments and continuously, automatically update these models as events emerge within time. Those managers which incessantly synthesize information to update their mental models will have the potential to react quicker to issues which may lead to 'strategic wear-out' or identify opportunities quicker than the competition in order to gain the advantages as a first mover. Such an activity should become so ingrained and involuntary that it itself becomes a desirable skill. Outputs of this skill could include ad hoc meetings called by any senior manager who has sensed changes in a firm's external environment which requires discussion and potentially changes to the organisation's strategy.

## **3. ENTREPRENEURIAL ACUMEN**

The habitual scanning and remodelling of a firm's external and internal settings will allow managers to identify opportunities as and when they emerge. Within the new era of dynamic capabilities, the ability of managers to identify opportunities is viewed as an essential skill (Teece, 2007). Such a skill is inherently entrepreneurial (Augier and Teece, 2009). Consequently organisations, small and large, require personnel at a senior level to demonstrate entrepreneurial traits of innovation, creativity, discovery, risk taking and most of all opportunity sensing. Although traditionally entrepreneurs have been associated with small firms (i.e. Busenitz and Barney, 1997), in this dynamic era large organisations are required to recruit, retain and provide the culture for individuals with entrepreneurial traits to identify and convince other less risk adverse managers to follow their acumen.

Marketing strategy formulation not only requires flexibility in order to identify and take advantage of opportunities as they merge but the entrepreneurial acumen to identify and promptly organise an organisation to seize an opportunity (Teece, 2007). The requirement of entrepreneurial skills within marketing echoes the work of Slater and Narver (1994) who call for marketing orientation theory to be combined with entrepreneurship. However this has since

expanded into the notion of entrepreneurial marketing. Like the notion of dynamic capabilities, Morris *et al.* (2002) advocate the importance of the proactive identification and exploitation of opportunities as a mechanism to overcome the continuing changing nature of contexts within which firms reside. Consequently, the requirement to recruit and foster senior marketing personnel with an entrepreneurial acumen to sense and convince other less risk adverse managers to pursue potential opportunities is essential.

#### **4. OBJECTIVES, STRATEGY AND TACTICS: FLEXIBILITY**

As elements of industries are constantly evolving, SOSTAC type marketing strategies codified in formal reports risk being 'pasted their best' before they have been distributed and digested throughout an organisation. High profile 'strategic wear-out' cases, such as the demise of the Polaroid Corporation in 2001 and the UK's Woolworth's Group in 2009 both demonstrate that not reacting to the changes taking place in the external environment has highly detrimental effect on firm performance.

Strategic marketing planning and thus the associated SOSTAC process followed by many must also take a more 'fluid' approach. Documented strategic plans should be treated as working documents which provide a sense of direction and an overall picture of what employees should be driving to achieve in terms of market share, sales and profits with the detail of how such targets are achieved left limitedly defined. This ensures an organisation does not fix itself to a path which may have a detrimental destination. Marketers should incorporate the notion of logical incrementalism (Quinn, 1978). Here it is argued that it is difficult for managers to develop an optimum strategy due to the cognitive limits as humans (i.e. Simon, 1947; Cyert and March, 1963) as well as the difficult task of orchestrating all internal decisions in accordance with all external events. Such a task is deemed so complex by Quinn (1978) that strategy formulation and implementation should only set broad goals which are strong enough to provide guidance but open enough to accommodate change as events and opportunities unfold within time. As it is impossible to predict all events which may occur within time, managers should make strategic decisions, in line with the goals set, as they go through time. Proceeding incrementally this way allows managers to respond to unforeseen events which occur avoiding any chance of 'strategic wear-out'. Quinn (1978) describes this as a dynamic process, which is more than fitting in the era of dynamic capabilities.

The ability to identify and take advantage of opportunities is merging as a central theme within the era of dynamic capabilities (Teece, 2007). However, opportunities can be sensed by managers at any point in time. Not just at the point at which strategy is formulated. The unforeseen introduction of the car scrappage scheme by many European governments in order to 'kick start' the car industry within the 'credit crunch' was seen by many as an opportunity. Yet due to the urgency in which the global economic crisis took hold many manufacturers would not have foreseen such an opportunity until it was upon them. Consequently, the ability to be flexibility with strategy formulation throughout time is a necessity in order to capitalise on opportunities which may, in the case of some car manufacturers, lead them from uncertainty.

The need to alter an organisation's strategy overnight is more than distributive to employees 'sense of direction'. This may in turn lead to dissatisfaction and the feeling of 'uncertainty' within staff at lower levels. Thus the overall goals and strategic direction of an organisation should remain relatively stable unless the events which unfold require major rerouting of a firm's strategic intent. In practice, in order to avoid such unrest it is the tactics, or the marketing mix, which should be adapted in order to capitalise on the opportunities which have been identified. European car manufacturers such as Fiat and Citroen did not radically change their

marketing strategies over night due to the introduction of the car scrappage scheme. Instead they devised promotional tactics, such as television and print media advertising, in order to capitalise on the car scrappage scheme, in turn attracting footfall to their websites and dealers.

## **5. ACTION AND CONTROL: TRIAL AND REFLECTIVE LEARNING**

Action concerns' planning the implementation of activity and control considers how managers should monitor the effects of the activity once implemented. Within the emerging literature on dynamic capabilities it is recognised that managers are only human (Augier and Teece, 2009) and thus are limited in their foresight and cognitive capacity to consider every eventuality. Consequently, never more than now should more emphasis be placed on the action and control activities within strategic marketing management. The importance of these activities lies partly in the conjecture of Slater and Narver (1995) who advocate marketing should embody organisational learning, with emphasis on generative learning - learning which challenges established norms. Generative learning is more than adept to the era of industrial dynamism considering 'Schumpeterian shock' theory.

As managerial knowledge is incomplete (Knight, 1921), often conjectural (Popper, 1963; Loasby, 1999) and lacking perfect foresight, it is only by doing do managers realise the true outcomes of their plans. Once this is realised the importance of action and control becomes substantial. Winter (2000) indicates that the implementation of an action allows managers to examine the outcomes and assess the performance implications of the action. This is not possible before or during the trial due to the limitations in managerial foresight and knowledge. Managers reflect on the results in order to allow them to make necessary adjustments. This trial and reflective learning process should, in the new era of dynamic capabilities, equate directly to the action and control components of the SOSTAC process. Managers should ensure control mechanisms, such as reflective meetings, are held subsequent to the implementation of agreement marketing actions. The results of these 'reflective meetings' should directly inform and adjust an organisation's strategy and tactics in an incremental manner.

## **6. DISCUSSION**

Dynamic capabilities have major implications on the practice of strategic marketing. This article advocates that the strategic marketing practice is required to evolve, shifting from a rigid linear process to a more of a reactive, incessant, habitual, entrepreneurial opportunity sensing managerial activity which is incremental in nature. This will thus allow organisations to be more agile, adapting to industrial change and even driving it. The recognition that managers are only human with limits to their cognitive abilities is important in the new era. As industrial change can be difficult to foresee, the need to be flexible with the tactics of a strategy is essential to quickly capitalise on opportunities as and when they are identified. Furthermore, as the outcomes of the actions of marketers are difficult to foresee, trial and reflective learning is a necessity in the new era of industrial change. The argument that strategic marketing practice should evolve to become more of an incremental and emergent process is further substantiated by the work of Hult, Ketchen and Slater (2005) who empirically determined a statistically significant link between responding to market traits and firm performance.

The strategic management literature is in the mits of attempting to comprehend the dynamic capability process. Within the discipline of marketing, the SOSTAC process and variants of it are the basis of the process marketers use to achieve a superior firm performance. Like scholars within strategic management, this paper has attempted to conceptually understand the basis of the activities marketers enact in order to achieve a superior performance in a world of constant change and uncertainty. However, this work is far from done and further research is required to fully comprehend the activities marketers use to deal with industrial dynamism. Such a research agenda is important to the wider economy. An understanding of the activities marketers use to

keep their organisations striving, even when industry change is upon them means problems associated with the failure of organisations due to ‘strategic wear-out’, such as unemployment, maybe avoided. Academic research into such a process is thus vital in order to educate the managers of tomorrow.

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## CHALLENGES IN FORECASTING EXCHANGE RATES BY MULTINATIONAL CORPORATIONS IN GLOBAL FINANCE ERA

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### **ABSTRACT**

*This paper deals with arising challenges in forecasting of exchange rates as mandatory financial activity with which Multinational corporations (MNC) are dealing with. Methodology that is used in this paper is mostly analytical and comparative in nature, based on observed research papers and knowledge of globally recognized authors (among others Madura and Fox). This paper deals with process of choosing relevant source for forecasting exchange rate and description of risk assessments of forecasting methods. Basic concepts of forecasting of exchange rate are presented as well as risks on side of Multinational Corporations related to exchange rate variation and exchange rate management. In addition, there is described very close relation between decision of management for investments, loans, hedging, budgeting on short and long run on one side and further measuring of specific risk exposure of Multinational corporations. Also, in paper are displayed systems for risk measurement which are highly important for resolving this specific risk issue. As most of economics literature states, long term and short term forecasting should be performed with different analyzing techniques with usage of different models and moreover long term forecasting is not reliable for decision making processes. Results of paper are summarized in conclusion and represents observation remarks on challenges that Multinational Corporation deals with when considering necessity of forecasting exchange rate. Downsides, strategy enablers and alternatives to traditional forecasting of exchange rates have key role in further determination of decision-making process.*

*This paper has value for multinational corporations, brokerage companies, and educational institutions.*

**Keywords:** *Multinational corporations (MNC), Forecasting exchange rates, International currency markets, Exchange risk assessment*

### **1. INTRODUCTION**

Among all differences between Multinational Corporations and domestic companies, most important one is that Multinational Corporations have operations worldwide. Hence, these companies have to deal with different foreign financial issues and one of the most important is dealing with exchange rates and its forecasting. Multinational Corporations needs to predict future currency movements in order to create environment for decision –making process. In addition, cash flow predictions are closely related to exchange rates predictions. Financial decisions are based on forecasting exchange rate. Reporting of financial statements is obligation

of Multinational Corporations that needs to be accomplished per regulatory requirements and that is influenced by exchange rates/investment decisions.

Within this paper, some of models of measuring methods of exchange forecasting are described. Types of risks that Multinational Corporations experience are numerous and response to different types of risks is based on individual problem and situation. Measuring these risks is fundamental part of exchange rate forecasting.

Observed research papers are analytically compared with deductive approach in conclusions based on latest practice and knowledge in field of international finance defined by Madura and Fox. Hedging decision, short term financing decision, short term investment decision, capital budgeting decision, earnings assessment, long term financial decision are described with notified Authors opinions regarding each. Also, risks related with exchange rate variation and types of risks that may influence on business activities of Multinational Corporation and quantitative econometrics methods as Net translation exposure measurement and Value at risk are presented in this paper.

Basics of fundamental and technical approaches with short turn on models for forecasting such as Purchasing Power parity model, Uncovered Interest rate Parity model, Sticky Price, Monetary model, Bayesian model averaging and Composite specification incorporating above mentioned four models are defined.

## **2. WHEN MULTYNATIONAL CORPORATIONS NEED TO FORECAST EXCHANGE RATE**

According to Madura and Fox (2011), academic model of Interest rate parity or International Fisher effect and Purchasing power parity lead to very strong explanation of exchange rates movements, while there is different situation in practice. In practice, theoretical forecasting abilities are not superior; actually, those abilities are on low level of forecasting accuracy. If one follows authors (Madura and Fox) further explanation, it is stated that Purchasing power parity and Interest rate parity of International Fisher effect are able to show approximately 10% of changes/variation into exchange rates (Madura J., Fox R, 2011). Possibility for forecasting could be grater then mentioned 10%, but there is problem with underestimated extreme situations and its influence on exchange rate variations. Therefore, it is situation in which “small” movements can be predicted, but “large” movements cannot be predicted with high level of certainty. This situation is not plausible on side of forecasting exchange rate movements by Multinational Corporations, because MNC’s will much more appreciate forecasting of high movements.

Also, Madura and Fox are relaying on six basic concepts when some Multinational corporation is interested in forecasting future exchange rates. These concepts are described and explained in following lines (Madura J., Fox R, 2011).

- Hedging decision
- Short term financing decision
- Short term investment decision
- Capital budgeting decision
- Earnings assessment
- Long term financial decision

## 2.1. Hedging decision

Hedging decision is closely related to revealing potential risks which may influence on exchange rate (Papaioannou, 2006). After having all risk measured, risk management plan should be created on side of top management of Multinational Corporation. One of most important strategies for future business revenues is hedging strategy. This kind of strategy can be used in several different shapes and structures (it should be modified from situation to situation and from user to user). In practice, chosen hedging strategy mostly depends on frequency of certain type of risk and the size of the Multinational Corporation (Papaioannou M, 2006).

Transaction risk is often hedged strategically or tactically in order to prevent earnings and cash flows related to the firm views on future exchange rate movements. When using tactical hedging, transaction currency risk from receivable and payable transactions is based on short-term period. When firm is using strategically hedging, then firm is considering procedures on long term basis. In addition, there is possibility for usage of passive hedging which does not require that firm takes analyses on currencies because execution will be performed on regular periods without taking in consideration currency expectations (Papaioannou M, 2006).

Balance sheet or translation risk can be hedged on none systematically basis, mainly in cases of avoiding shock effect on net assets. Mentioned risks are mainly related to long term exposure on foreign market. Example could be debt structure of foreign subsidiaries. (Papaioannou M, 2006).

For translation risk on currency, related to value of above mentioned subsidiary as example, standard practice is to hedge the net balance of the firm (Papaioannou, 2006). Same author presents in his work that economic risk is often hedged as a residual risk. As economic risk is very difficult to be measured because it measures potential impact on the present value from one hand and cash flows from the other. In a situation where inflation rate is followed by exchange rate excursions due to Purchasing power parity (PPP) and MNC have subsidiary which is facing inflation above expected inflation rate, competitiveness of the firm can be found as a result of adjustment of exchange rate that is not in line with PPP (1).

Hedging translation adjustment is used as method for minimizing adverse reactions of exchange rates on net income and cash flows (Bandopadhaya, et al, 2010). According to same authors, corresponding accounting issue is in recording all gains or losses from hedging operations and also recognizing both under net income in same period as the gain or loss on the risk being hedged. This is referred as hedging accountant and it should follow all hedging activities in case of need (Bandopadhyaya, et al., 2010).

## 2.2 Short term financing decision

Most of companies and especially MNC's use short term financing decisions. Main reason is in reaching access to additional funding. Decision should be brought on management level and all managers should be informed about potential risks of this type of decision making. In addition, maximization of value of Multinational Corporation is expected outcome of use of short term financing decisions (Madura J., Fox R, 2007).

Main sources of short term financing decision are following:

- Euronotes
- Euro-Commercial papers
- Eurobank loans



Euronotes usage represents a method that is increasingly used by MNC as type of new source for financing. Euronotes are unused debt securities with interest rates based on LIBOR (interest rate Eurobanks charge on interbank loans). Maturities of euronotes are on monthly, annual quarter or annual half basis. Mostly commercial Banks are the one that underwrite the notes for MNC.

Euro-Commercial paper, is also source of additional financing that is used on side of Multinational corporations. Dealers issue Euro-commercial paper without the back-up of an underwriting syndicate, therefore selling price is not something which is guaranteed for issuers (Madura J., Fox R, 2007). Also, dealers create secondary market by offering Euro Commercial paper to be resold before maturity.

Eurobank loans, represents direct loans from banks and are very popular source of financial funding for MNC. This is often used as an option when other financing sources are not available. There is estimation that a lot of MNC's have loan arrangements with large number of banks on domestic and international level (Madura J., Fox R, 2007).

### **2.3 Short term investment decision**

Short term decision is protecting need of Multinational corporations to have new investments that exceeds cash in short period of time. Ideal situation will be adjustment of exhibiting of high interest rates and strengthening of respective value over time investment (Madura J., Fox R, 2011).

### **2.4 Capital budgeting decision**

Capital budgeting decision need to be brought in order to investigate proper investments, especially foreign direct investments. Multinational corporations have to take in account that there will be changes of exchange rates when referring to specific currency. Analysis of capital budgeting can be managed only in case when all cash flows are estimated and translated to parent company in local currency. Capital budgeting technique also allows Multinational corporations to find best possible solution for further investments. Reasons for investing could be related to surviving of the company or to further spreading and conquering foreign markets. Basic usage of capital budgeting techniques are in purpose of clarifying project possibilities, but moreover in reaching better overall outcome of future investment in regards of specific international project (Dayanada D., et all, 2002).

### **2.5 Earnings assessment**

Multinational corporation parent company need to make decision whether earnings from their subsidiary will be further invested to foreign country or earnings will be sent back to parent company. Main reason for such decision-making activity is related to exchange rate fluctuations and it could be observed trough translation of earnings into parent company. As an outcome, result should be evaluated with measured earnings from foreign investment country (Madura J., Fox R, 2011).

### **2.6 Long term financial decision**

Multinational Corporations financial decision is mostly defined by the interest rates. Cost of long term investment is based on percentage change in exchange rate on currency during loan duration (and on quoted interest rate). In practice, bonds denominated in foreign currencies

have lower yields in U.S. corporations mainly consider issuing bonds in these currencies. There should be noted that this is not always case. Multinational Corporations as Disney, Hewlett Packard and IBM, issued bonds in Japanese yen in order to capitalize because yen has lower interest rate. There is no guarantee that the bond will be less worth than U.S. dollar bond that is denominated (Madura J., Fox R, 2007). In order to create long term financing decision, Multinational Corporations must (Madura J., Fox R, 2007):

1. Determine the amount of funds needed
2. Forecast the price at which it can issue the bond
3. Forecast periodic exchange rate values for currency denominating the bond

According to information above mentioned, bond financing cost could be measured and afterwards it can be compared with financing costs that firm would gain using its own currency.

### **3. RISKS ON SIDE OF MULTY NATIONAL CORPORATIONS THAT ARE RELATED WITH EXCHANGE RATE VARIATION AND EXCHANGE RATE MANAGEMENT**

#### **3.1 Risk related with exchange rate variation**

A common types of exchange rate risk relates to the effect of unexpected exchange rate changes on the value of the firm are following (Papaioannou M, 2006)

- Direct – result of un-hedged exposure
- Indirect loss – in the firms cash flows, assets and liabilities, net profit, in turn, its stock market value from a exchange rate move

For managing exchange rate risk inherent in every multinational operation, Multinational corporations have to perform following activities (Papaioannou M, 2006)

- Determine specific risk exposure
- Chose and set Hedging strategy
- Available instruments to deal with currency risk

Multinational corporations participates on currency markets through their international transactions. Multinational corporations have to find value at risk (VAR) – that measure the impact of exchange rate movement. Multinational Corporation firstly needs to identify type of risks that MNC is exposed to and the amount of risk encountered (Papaioannou M, 2006)

Tree main types of exchange rate risks are (Papaioannou M, 2006)

- Transaction risk, cash flow risk that deals with the effect of exchange rate moves – it influence to receivables (export contracts), payables (import contracts), or repatriation of dividend.  
Exchange rate currency on such contracts will automatically influenced into direct transaction exchange rate risk to the firm
- Translation risk, balance sheet exchange rate risk – exchange rate moves to the valuation of foreign subsidiary, and in turn it affects parent company balance sheet. This risk is usually measured by exposure of net assets \*assets less liabilities, to potential exchange rate moves. Consolidation could be done at the end of period of exchange rate of specific

period or at the average exchange rate and that only depends on accounting regulations of specific parent company.

- Economic risk, risk to the firm present value of future operating cash flows from exchange rate movements, Economic risk influence on exchange rate on revenues (domestic sales and exports) and operating expenses (cost of domestic inputs and imports).

Bandopadhaya, et al (2010) in its work agree with Papaioannou (2006), because main three types of risks related to exchange rate influence on Multinational corporation are defined by Madura (2006) and this respective opinion is accepted as best defined learning practice worldwide.

Bandopadhaya, Gotti and Lu (2010) have described also transaction exposure and they have added important fact that duration of exchange rates effects on transaction exposure are taken into consideration.

Short term exposure will apply significantly stronger influence on Multinational corporation payments comparing to long term exposure. The main reason for such statement is found in firm ability to create or change investment strategy and to adjust its operational management (Bandopadhyaya, et al., 2010).

Bandopadhaya, et al (2010) added that translation exposure is at first place initiated with local regulations and therefore with usage of local currencies in recording of their subsidiary local transactions. Hence, their financial statement have to be translated into parent company currency at every accountant period which is also defend by legislation and with rules of procedures of parent company. This translation can be managed with usage of historical exchange rate, current change rate or average exchange rate. Also, authors notify that there are present two main issues during translation process. First reason is usage of different exchange rates in terms of historical, average or current which could lead to imbalance on translated balance sheet of subsidiary. Second reason is related to usage of current exchange rate which is changing all the time and do not present constant value (Bandopadhyaya, et al., 2010).

#### **4. MEASUREMENT OF EXCHANGE RATE RISK**

Measuring of currency risk may appear difficult, at least with regards to translation and economic risk. (Papaioannou M, 2006)

Transaction exposure is related to cash flow risk. Cash flow will further influence on transaction accounts on side of receivables i.e. export contracts or potentially dividends repatriation. Changing of exchange rate in currency of denomination will further result in direct transaction exchange rate risk for company. (Papaioannou M, 2006)

According to Bandopadhaya, et al (2010), two methods are commonly used for measuring exposure of transactions (2):

- Net translation exposure measurement
- Value at risk measurement (VAR)

#### **4.1 Net translation exposure measurement**

This type of risk measuring is used when Multinational Corporation need to make consolidation from inflows and outflows in foreign subsidiary on currency by currency basis according (Bandopadhaya, et al, 2010). Advantage of this method is in fact that Multinational corporation will be able to identify expected net positions in foreign currency for observed following periods. After net currency flow is determinate, it can be used as a whole or as a range for specific currency. Afterwards MNC need to consider ratio between all currencies and to compare with currencies variability and with correlations among currencies (Bandopadhyaya, et al, 2010).

#### **4.2 Value at risk**

By using this method, Multinational corporations are estimating risk of a foreign currency position in correlation with companies activities (Papaioannou, 2006). After defining most important risks, MNC need to measure risks. Mostly used type for measuring is Value at risk method. VaR does not show what happens to exposure (100-z)% point of confidence – worst case scenario. Because of that, companies often use risk management methods such as stop loss or they put some operational limits.

VAR calculation depends on tree parameters (Papaioannou M, 2006):

- Estimated time for position duration, typically 1 day
- The confidence level when estimated is planned to be done. Usually it is around 95-99%
- Currency that is used for VAR denomination

VaR method use currency volatility and correlations to determine the potential maximum one-day loss over a given target time horizon and confidence limit in the value of Multinational corporation's positions that are exposed to exchange rate movements (Bandopadhyaya, et al., 2010).

For VaR calculation there are many different models, but most used ones are following (1):

- The Historical simulation – assumes that currency returns on companies foreign exchange position will have the same distribution as previous was
- The Variance covariance model – assumes that currency returns on previous position and also that the change of value is linearly dependent on all returns
- Monte Carlo simulation – assumes that future currency returns will be randomly distributed

### **5. EXCHANGE RATE FORECASTING**

Usually, forecasting of currency pair movement is settled in near future. The forecast represents the average expectation of value variable movement. Two main approaches of forecasting foreign exchange rates are (Madura J., Fox R, 2011):

1. Fundamental approach
2. Technical approach
3. Market based
4. Mixed

Fundamental approach is mainly based on wide specter of data on side of economics variables in order to predict future fluctuations of watched currency. These economic variables are based on models and usually include GDP, Trade Balance, Inflation rates, interest rates, productivity indexes among others. Fundamental approach is based on equilibrium models. Afterwards, to these models we have to add statistical information. Practitioners are working on creation of specific models. When model is prepared, all deviation from real market fluctuation should be considered as potential trading signal. Model can be based on Purchasing Power parity and then with additional combination of theories.

For operation of measuring translation gains and losses and also translation operating exposure Multinational Corporations need to make accurate estimation of future exchange rates. In a case of Hedged position, there is option in which such situation could lead to losses in future if exchange rates are constantly differ from forecasted ones.

If analysis is based on empirical results, we can say that results are not still on satisfactory level according to numerous literatures. General opinion is that spot exchange rate is random-walk and structural exchange rate models are not able to forecast this simple random-walk model.

Here bellows are mentioned some of models for exchange rate forecasting (Bandopadhyaya, et al, 2010):

- Purchasing Power parity model (PPP) – theoretical exchange rate, explains movements in exchange rate between two economies and currencies in terms of changing price level.
- Uncovered Interest rate Parity model (UIP) – describes how the exchange rate moves according to the expected returns of interest rate
- Sticky Price (SP) – modified PPP model, that implements macroeconomic variables, money demand and over shooting effects
- Monetary model
- Bayesian model averaging (BMA) – combined model that uses different model settings in time frame
- Composite specification incorporating above mentioned four models

It is important to mention existence of square forecast error or Main square error, which is used for forecast accuracy measurement. This econometric tool is used primarily in situation in which we have combined models (Papaioannou M, 2006).

## 6. CONCLUSION

Multinational corporations need to monitor and forecast foreign exchange in order to have clear situation in regards of their current and future business conditions. Without sophisticated analyzing of exchange rate movements, Multinational Corporation will be completely out of data which are of outmost importance for its strategic business activities. In this paper there is described relation between decision of management for investments, loans, hedging, budgeting on short and long run on one side and further measuring of specific risk exposure of Multinational corporations. Also, in paper are displayed systems for risk measurement which are highly important for resolving this specific risk issue. Hence, we can conclude, that

Multinational Corporation management is at high pressure in order to bring appropriate determination of future currency fluctuation. As most of economics literature states, long term and short term forecasting need to be done with different analyzing techniques with usage of different models, but anyway, long term forecasting is something that is not so reliable for decision making processes.

In managing risks, Multinational Corporations often use hedging strategies, and specific hedging strategy depends from respective situation. Hedging strategies becomes very complicated because they are developed to address transaction, translation and also economic risk. As these risks are something that influence all companies (not considering size of companies), there is increased number of users of hedging strategies and there is higher demand for hedging protection and also greater variety of hedging instruments (Papaioannou M, 2006).

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## TOWARD BETTER CORPORATE GOVERNANCE IN SMALL AND MEDIUM-SIZED ENTERPRISES

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### **ABSTRACT**

*Corporate governance is “meta-management” and involves a set of relationships and interactions between management, the board, shareholders and stakeholders. It defines the framework for setting objectives and determining the resources for achieving these objectives and monitoring execution and effectiveness (OECD, 2004; Tipurić, 2011). Corporate governance is a relationship between various participants upon determining the direction and success of the corporation; the basic participants in this process are the owners of corporations, management and the board; the other participants are employees, customers, suppliers, creditors and wider community (Monks and Minow, 2008; Mešin 2013). Good corporate governance is based on the appropriate combinations of the legal protection of investors and the level of ownership concentration (Shleifer and Vishny, 1997; Tipurić, 2006).*

**Keywords:** *Corporate governance, SMEs*

### **1. INTRODUCTION**

Corporate governance in small and medium-sized enterprises (SMEs) is part of a broad area of corporate governance in *unlisted* companies that is business entities that are not organised in the form of a joint stock company whose shares are listed on a regulated capital market, whose scope is very wide and includes newly established companies, family companies, private joint stock companies, joint companies and subsidiaries. Unlisted companies are of particular importance in countries with less developed capital markets, where the majority of large companies are not listed on the stock exchanges or regulated markets. However, even in developed economies, the majority of smaller and medium-sized enterprises are not publicly listed on regulated stock markets.

The growing role of corporate governance has not only been recognised in large companies listed on stock exchanges but rather also by owners and managers of small and medium-sized enterprises facing ever more demanding and critical investors, shareholders, customers and suppliers who are demanding greater transparency, expert leadership and control and supervision structures. Advancements in corporate governance in small and medium-sized enterprises has the potential of increasing growth of productivity and the creation of business both in developed economies but also in those that are just beginning to develop.

### **2. IMPORTANCE OF SMALL AND MEDIUM-SIZED ENTERPRISES IN MODERN ECONOMY**

Small and medium-sized enterprises are one of the more important drivers of overall economic development and they encourage private ownership and entrepreneurship, they generate employment and significantly contribute to increasing production and exports (Sudarić, 2011).

Small and medium-sized enterprises ensure competition, entrepreneurship and innovation and provide new jobs and boost economic efficiency. Small and medium-sized enterprises do not need large capital or business premises; they are dynamic and flexible with a developed entrepreneurial spirit and have significant advantages compared to large companies. In SMEs ownership, the management function and bearing of risk are usually in the hands of one person or a few partners. Subsequently their organisational structure is shallower, communication

within the organisation faster, while the tenacity of the company is greater, therefore one should not be surprised at the continual growth in the number of small and medium-sized enterprises in recent decades.

Small and medium-sized enterprises are the backbone of economy, and their significance is particularly recognised through their share in employment but also in overall achieved earnings and exports. Small and medium-sized enterprises are very important: their share in total allocations for European GDB amounts to more than two thirds. Therefore small and medium-sized enterprises are one of the key factors in the implementation of the renewed Lisbon strategy, i.e. the part of the strategy that refers to economic development and employment (Kutnjak, 2011).<sup>127</sup>

The issue of the performance of this part of the economy is more significant than ever before - due to long-term high levels of unemployment (and it is precisely small and medium-sized enterprises, not large ones, that are the generators of new jobs) and the European Union economic policy for small and medium-sized enterprises and its given special importance.

Incentives for and the creation of small and medium-sized enterprises is a desirable and growing phenomenon, however this does not mean that many small enterprises don't fail. Under conditions of a big, global level crisis, it's not easy to start one's own business, and it's even harder to ensure the survival and prosperity of such an undertaking.

Small and medium-sized companies are different from companies listed on the stock exchange both in their legal form but also in terms of size, whereupon we see companies that general multi-million earnings, however also small *start-up* companies that have an established supervisory board and whose system of corporate governance is very limited.

### 3. UNLISTED COMPANIES AND GOVERNANCE DILEMMAS

Listed joint stock companies have listed shares on a stock exchange (regulated capital market). Other forms of companies are *unlisted* companies: these are for example different forms of limited liability companies, such as newly established and family companies, but also private joint stock companies, joint companies and subsidiaries, as well as other forms of companies. Government-owned companies must also not be forgotten, which in the majority of cases fall within the category of unlisted companies.

Unlisted companies are very important for the economy, particularly for countries in which the capital market is not developed, and in which the majority of companies (even large ones) are not listed on the stock exchange or regulated markets.

Corporate governance is important for unlisted companies, although the classical principles for listed companies cannot also be applied to unlisted ones.

Despite the large number and importance of unlisted companies, corporate governance in them has only just begun and significant progress is only expected in the upcoming period. Specifically, in the majority of countries, the national codes of corporate governance refer exclusively to listed companies. It is precisely listed companies that are the focus of interest in the corporate governance discipline, which isn't good because the great majority of

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<sup>127</sup>Kutnjak, G.(2011) Europska unija u funkciji poticanja i razvoja malog i srednjeg poduzetništva (The European Union encouraging and developing small and medium-sized enterprises). In: Toth, I. ur. Collected papers IV International conference "Days of crisis governance", 25 and 26 May 2011 , Polytechnic Velika Gorica



companies in a national economy are unlisted companies. Thus there exists a danger that unlisted companies shall refrain from developing an appropriate framework for quality governance which could have a negative implication on their long-term effectiveness and success.

Corporate governance in unlisted companies provides potential for growth in productivity and transparency in economy but it must be mentioned that use of the classical principles of the best corporate governance practices of listed companies is not really the best solution, given that the challenges of listed companies in corporate governance are completely different from those of unlisted companies.

Namely, listed companies for the most part have a larger number of external minority shareholders and can be managed by professional managers who do not necessarily have shares in ownership. The governance framework of such companies has a tendency to focus on ensuring the option of implementing effective supervision and control of management and the board for external shareholders. This often presents a challenge that characterises "modern corporation" recognised by Berle and Means in their work in the early thirties of the past century, and who noticed a strong concentration of power and the onset of a new class of professional managers (Berle and Means 1932).

On the other hand, the majority of unlisted companies are owned and under the control of individuals, a number of partners or family, so that the owners continue to have a decisive role in management and decision making. Good governance, in such a situation, is no longer a question of protection of interest of absent shareholders, rather is orientated toward forming a framework of important processes that will give additional value to the company and enable its business success and development.

In our opinion, unlisted companies are faced with a greater challenge of governance than listed companies. Regulation, namely, affects the behaviour of listed companies. A significant portion of rules, standards and provisions for corporate governance may be imposed on listed companies outside of various types of laws, regulations, ordinances and other formal requirements for listing on the stock exchange. For unlisted companies the area of development of corporate governance is much broader and substantial, this means that there must be motivation within the company for inclusion in the process of development of good corporate governance practices.

Voluntarism means recognising the opportunity that the introduction of processes that improve corporate governance practices may provide. Therefore, unlisted companies must consider the potential costs and benefits of various governance approaches and then implement them.

The problems of insufficient resources for implementation of corporate governance models, as well as the lack of adequate tools that could assist in developing good corporate governance practices in unlisted companies, should be point out as well.

#### **4. ENHANCING CORPORATE GOVERNANCE IN SMALL AND MEDIUM-SIZED COMPANIES**

For a long time, corporate governance was primarily linked to management and problems of transparency and publishing information in large companies listed on the stock exchange. When looking at lists of joint stock companies on any stock exchange in the world, rarely can one find a company that classifies in the category of small and medium-sized companies.

Small and medium-sized companies are an important part of the group of unlisted companies. The establishment of an efficient governance framework that defines a company's approach to any individual problem is of equal importance to all companies regardless of size. Globalisation trends and challenges have also imposed this need on small and medium-sized enterprises too. Small and medium-sized enterprises are exposed to competition and market verification within the dimensions of business management, control, finances and system transparency. Aside from this, small and medium-sized enterprises are forced to comply with increasingly greater demands of international standards with the aim of securing their own future in integrations that are becoming our everyday norm (e.g. EU and trade association, etc.).

Small and medium-sized enterprises are important partners of large corporations who impose increasingly stringent business criteria. To prove themselves reliable business partners of superior quality, small and medium-sized enterprises with pretensions of becoming suppliers on the big acquisition market of large corporations are obliged to comply with increasingly stringent business criteria. Among other things, small and medium-sized enterprises are obliged to present evidence of *good corporate governance* within them (Kohler, 2012).<sup>128</sup>

From the viewpoint of small and medium-sized enterprises, corporate governance is a group of rules, regulations and structure whose objective it is to reach optimal performance through the implementation of corresponding effective methods to achieve the objectives of the company. It is related to the internal structure and systems that supervise and govern relationships between key stakeholders, important for the effective functioning of the company. It supports the survival of the company in the long run and provides the basis for assuming *responsibility/accountability* (El-Fotouh, 2015).<sup>129</sup>

Some authors propose norms for good corporate governance practices in small and medium-sized enterprises. Dube et al. (2011) propose the following activities for corporate governance in small and medium-sized enterprises:<sup>130</sup>

1. Prepare and publish mission statement of enterprises
2. Enterprise policy statement to manage business growth
3. Enterprise successions plan
4. Annual management and accomplishment statements
5. Management structure and level of professional qualification relevant to industry
6. Method of accounting and disclosure of audited account
7. Stakeholder relations and welfare undertaken by the enterprise
8. Legal and regulatory compliance

There are numerous reasons why small and medium-sized enterprises should engage in corporate governance. Our long-term business experience indicates that it is possible to identify at least three reasons: improvement of performance and business efficiency, better position of the company in the case of new loan requirements or sale of the company and building reputation on the market, business community and in the company.

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<sup>128</sup> Kohler, D, Deimel, M. (2012) *Corporate and Good Governance in German SMEs*.

Accessible on: <http://www.tefen.com/index.php?id=462&type=123> (06.05.2015)

<sup>129</sup> Hany Abou-El-Fotouh, quoted according to :<http://www.articlesbase.com/small-business-articles/importance-of-corporate-governance-for-smes-917533.html> (02.05.2015)

<sup>130</sup> Dube I., Dube D., Mishra P. (2011), Corporate Governance Norm for SME, *Journal of Public Administration and Governance*, Vol. 1, No. 2

Small and medium-sized enterprises must conduct business within a social environment in which there is greater public control of business conduct. The management of companies has become a subject of growing interest to the media and civil society. Furthermore, there have been increasing demands on greater business accountability and transparency given the irresponsible behaviour of various actors during the recent global financial crisis. A reputation is hard to earn but is so easily lost.

Therefore, good governance may play a key role in gaining the respect of key stakeholders, e.g. existing and potential providers of loans and other finances and resources, also employees, customers and users, suppliers and the community in which the company operates. Good corporate governance practices ensure a width and range in company activities because they send strong signals to stakeholders that the company is being run in an appropriate and responsible way, with due regard for the interests of all important actors.

When the activities of a company deviate from the expectations of important actors and stakeholders when companies don't fulfil social expectations, then it is quite reasonable that the company may suffer significant consequences. Even when a company operates within a legal framework, if it does not have good corporate governance, it may be damaged by the negative perception of employees, clients and all others. The implementation of a good corporate governance framework is the main resource with which such significant risks related to reputation may be mitigated.

Relevant category of small and medium-sized enterprises are family owned companies and, for them, good corporate governance might be potential to improve management efficiency, potential for limitation and reduction of intra-organisational conflicts and assistance in future transitions in ownership (or governance) which inevitably comes with time.

Small and medium-sized companies may be faced with many problems if they intend to implement a corporate governance framework. One of the most commonly observed of these is the fact that implementation of corporate governance activities are burdened by costs; while the effects of their introduction are not immediate rather a certain amount of time is required for the results of good practices to be seen in company economics (El-Fotouh, 2015). Therefore it is recommended that corporate governance processes are introduced gradually and in accordance with financial, personnel and organisational capabilities of the company.

## **5. BASIC PARTS OF CORPORATE GOVERNANCE IN SMALL AND MEDIUM-SIZED ENTERPRISES**

As opposed to large companies, in a large number of small and medium-sized companies ownership is directly connected to governance. Entrepreneurs are at the heads of their companies and have full authority over governance. This close connection between owners and management may however cause a crisis in company governance in the event of family disputes, opposing interests and similar problems.

Aside from this, the company with its growth (or due to natural reasons - advanced age, disease, etc.) may reach a point where the entrepreneur may no longer be in a state to simultaneously fulfil the role of owner and manager. Then it is necessary to consider how to *professionalise management*, i.e. the most efficient way of handing over authority from the owner to the new managers, whether it is family or completely new directors.

Further, when compared to public joint stock companies, small and medium-sized enterprises, for the most part, have limited financing options. Insufficient access to capital markets limits

their choices, and small and medium-sized enterprises are orientated towards traditional banking financing.

One of the important steps in long-term corporate governance for small and medium-sized family enterprises often refers to the appointment of a successor. Insofar as a family wants to continue managing a company, it must ensure potential candidates and prepare them adequately to conduct business. In this phase larger families are faced with personal conflicts that may endanger future business operations.

This is not an easy job because it is difficult for an entrepreneur to separate himself from his activities to date. It is very important to formalise the transition in management well: through structured division of powers and clear competency domains of the new management. For example, the question of authority over disposal of financial resources, making investment decisions and general defining of the range and scope of those decisions for which previously consent or authorisation by the entrepreneur who is now taking over only the ownership function, retaining control instruments was required. Given that it is not possible nor should it be generalised, the size and transfer of authority should be differentiated depending on the situation of the transition of the entrepreneur into the owner, and depending on the structure, size, scope and complexity of the business with which the company is involved.

In any case, such a transition provides an opportunity for balancing the imbalance of power in entrepreneurial companies. The principle of good corporate governance lies in the fact that no one person, after the transition, should have unlimited decision making powers. An appropriate and well-structured division of authority between new the management and the entrepreneur-owner is essential. The fulfilment of this principle is often a challenge in companies that have been established and managed on the basis of the autocratic control of one person (or a smaller group of partners). This type of governance principle may be favourable in the early phases of company growth, however in the long-term such a model is unsustainable. An appropriate division of powers is therefore a demanding task for any small or medium-sized enterprise in such a situation and shall probably require gradual harmonisation of management needs with the readiness of the entrepreneur to accept control from the outside.

Therefore the professionalization of management is essential in the case when the entrepreneurial phase of development of the company ends. Aside from practical difficulties that occur when all decisions are made by one person, the lack of appropriate division of power exposes a company to human weakness. Even the most capable individual may sometimes lose their capacity for objective analysing of problems. That is why it is not good that autocratic entrepreneurs are succeeded by autocratic successors or managers. Mutual control is not a bad solution at all. It is important to establish governance procedures that shall be contained with a framework of quality control mechanisms at the top of the management structure. Also, within a company there should be a clear line of accountability and division of powers.

Furthermore, for the implementation of good management practices, it is assumed that within a company there should be a clear hierarchy of accountability. There should be a hierarchy of accountability and power at every level in small or medium-sized enterprises, and they should be connected to the execution and implementation of powers. The hierarchy of accountability begins at the bottom of the organisational pyramid where each higher level of management observes and supervises the level underneath it. Employees are accountable to bosses who notify managers at the top. Finally, professional managers are accountable to the owner (owners) and other stakeholders.

To ensure that accountability has an impact on behaviour, it is important that every employee and manager understands the expectations related to the nature and scope of their responsibilities. The expansion of small or medium-sized enterprises in terms of size and complexity require formalisation in the form of rules of clear business conduct that also includes ethical principles. The principles of corporate governance of a company should be regularly reviewed and updated so that the company is an example of good practices and so as to improve its effectiveness.

Once responsibilities are defined, the efficient functioning of the system depends on appropriate supervision that should be provided by the entrepreneur. This shall only be possible insofar as there is information with the aid of which the conduct and performance of the management shall be evaluated. That is why the formation of a good *reporting and control framework* is an important aspect of good corporate governance. Reliable and understandable information is required through which the quality of the company's performance, but also the quality of the management's performance may truly be assessed. The role of internal and external audits is also important, if it is determined that there is a need for their introduction.

Transparency in relation to the activities of the company may be effective in encouraging a high standard of conduct. Managers shall probably pay more attention to their behaviour if they realise they are being observed. A certain transparency level of activities in a company are defined by legislative solutions, however for small and medium-sized enterprises so called voluntary reporting is much more important, especially in the segment of financial reporting.

Small and medium-sized enterprises may choose to voluntarily disclose information over that legally required for the purpose of gaining the trust and involvement of external stakeholders.

If one takes into account the fact that small and medium-sized enterprises are characterised as companies not orientated towards the public, time shall be required for transparency to become part of corporate governance and for the entrepreneur (or partners) to see that it carries with it benefits in the long run. Instead of sudden changes, an appropriate strategy may include a gradual increase in the company's transparency.

In conclusion, small or medium-sized enterprises must decide about the scope of their "disclosure" to the public. This is particularly important insofar as the company seeks (or shall seek) external financing. As we mentioned earlier, this may also be key in the building of reputation capital.

Greater transparency contributes to establishing a company's legitimacy as a responsible company in the society as a whole. The public views companies not characterised by transparency with increasing suspicion. The underlying assumption of the public is that companies are hiding something and that they are acting contrary to public interests, especially if they are not reporting about their activities. Modern and development focused companies cannot afford to ignore such attitudes in society, even if their legal obligations regarding transparency are lesser or even negligible.

Finally, reward and recognition policy is an important segment of corporate governance in small and medium-sized enterprises. Some believe that small and medium-sized enterprises benefit from the fact that they are not under public supervision and binding transparency in relation to remunerations to the same extent as are large, listed companies. However, small and medium-sized enterprises have the same need to ensure that remuneration policy stimulates managers and employees to behave in a manner consistent with the long-term interests of the company. Furthermore, a transparent remuneration policy may help in gaining the commitment of all

important stakeholders regarding a company's objective. The corporate governance model in small and medium-sized enterprises should answer the following questions: what are the relevant reference points and efficiency criteria in the remuneration process, which makes decisions about remuneration and how much information should be disclosed regarding remuneration in the company.

## **6. THE CHALLENGES OF CORPORATE GOVERNANCE IN SMALL AND MEDIUM-SIZED ENTERPRISES**

Adapting corporate governance in small and medium-sized enterprises is a demanding task. When we take into account the wide range of individual forms in which small and medium-sized enterprises can appear, it is difficult to find a way in which corporate governance may be adapted to all entities in this segment. One of the ways in which small and medium-sized enterprises should deal with the challenges and assist in the implementation of a corporate governance framework has been presented in the paper of Abou-El-Fotouh (2015) who offers the following advice:

- Separate ownership from management obligations and specify clear roles and responsibilities for owners, partners and important stakeholders
- Appoint a supervisory board (or board of directors) in which there shall be balanced relationships between members appoint an external expert (who can assist in creating value) as a member of the supervisory board (or board of directors)
- In companies where it is not necessary to have a board, form an advisory body with external experts with the task of improving corporate governance, particularly in assisting in ensuring the integrity of financial data to reduce business risk and protect the owner (or owner partners) and to prevent opportunistic management behaviour
- Introduce lineage charts and succession plans, and ways of resolving conflicts in the organisation
- Draft and introduce a Code of business conduct which should explain and elaborate on all the elements important for corporate governance.
- Spread a corporate culture in which the benefits of good corporate governance practices will be felt.
- Educate managers in strategic planning and budgeting techniques
- Introduce an independent internal control position

Each of the aforementioned areas is a challenge for small and medium-sized enterprises. One of the issues that arise is related to the adoption of a separate Code of corporate governance that would apply to small or medium-sized enterprises. From a legal standpoint, a code of corporate governance (characteristic for joint stock companies) seems impractical for small and medium-sized enterprises, and would probably generate more bureaucracy than benefit. Company regulations and the provisions of company law differentiate in such a measure that it is almost impossible to identify generally applicable rules of conduct.

Based on the previous analysis, we have concluded how to help small and medium-sized enterprises in complying with the growing demands for corporate transparency and quality. We believe that one of the best solutions would be the introduction of documents specific for the subject company in which would be documented. The Code of business conduct (which should be more general and with many more segments) would in this respect become a key

component of sustainable development and growth of values for the company (Kohler and Deimel, 2012).

In addition, the company must ensure an adequate plan depicting not only the management structure, but rather also the system of supervision and control with the aim of paving the way for successful leadership. Furthermore, individual guidelines of corporate governance, such as mediation rules, could be of assistance in easing and resolving family disputes.

Due to the close relationship between the management and partners in the company, continuity is of great importance and may involve various challenges, particularly regarding the manner of succession. Successors need time to grow into their roles and to identify with the company founders. Thus timely and systematic planning of successions is an imperative for business operations. Namely because they don't have a succession plan, countless companies often find themselves facing problems due to unexpected accidents or illnesses of their leaders. Sustainable development of future managers should be objectively evaluated, while managers should have access to development programmes such as *coaching* (Kohler and Deimel, 2012).

Furthermore, it is also important to form clear management structures. Small and medium-sized enterprises are often characterised by centralised decision making: the management style is for the most part authoritative. One person often decides about the fate of all other members of the company. Although this type of situation facilitates faster decision making, sole reliance on top managers should be critically evaluated. Namely, insofar as an entrepreneur or manager is unable to perform his duties, this may jeopardize the company's business given that the rest of the organization is authorized to collect information but not to also make decisions. Secondly, such situations prevent expedited transfer of business operations and create so called "bottlenecks" in the entire system.

Good corporate governance practices in this respect recommend the appointment of persons in charge of company management in crisis situations. The supervisory board is an ideal mechanism that ensures critical examination of possible actions and the adoption of pertaining decisions (Kohler and Deimel, 2012).

Finally, many small and medium-sized enterprises have as their objective the achievement and maintenance of financial independence from external sources of capital for as long as possible. With the aim of achieving this objective, it is important to consider the following points: good corporate governance includes defining clear long-term guidelines for decisions related to finances, however also that financial independence also assumes the independence from suppliers and key customers and mutual payment systems. The same also refers to abiding by tax legislation and the basic financing principles, e.g. settling long-term liabilities, that is, debts and principal, etc. Optimisation in the short term, such as the acquisition of new machinery using an existing line of credit, may endanger the long-term finances of the company. This kind of mistake can be prevented by clearly formulated regulations and systematic management (Kohler and Deimel, 2012).

## 7. CONCLUSION

Corporate governance is not only important for large companies that list their shares on a stock exchange: the principles of corporate governance may also be useful for small and medium-sized enterprises, and may contribute to advancement of their operations and better quality development. Good corporate governance also requires the professional use of various standardised mechanisms, tools and processes that facilitate long-term planning and controlling. There are reasons why small and medium-sized enterprises should engage in corporate governance: improvement of performance and business efficiency, better position of

the company in the case of new loan requirements or sale of the company and building of an additional reputation on the market, business community and in the company.

Corporate governance has an increasingly greater role as a company grows. The moment when a small or medium-sized enterprise (actually an entrepreneur or partners) hire a professional manager is high time to start thinking about introducing the principles and practices of corporate governance. Namely, by bringing in a professional manager, the separation of the ownership and managerial role in the company begins, which can lead to problems. This is why it is important to create a planning and control system that shall ensure a quality supervision function and to create a system of connecting models for rewarding managers with achieved results. Awareness about financial independence and a balanced structure of financing is a clear sign of good corporate governance practices. Management systems should also include provisions for clear communication and processing of information from the financial system.

Corporate governance also assumes a good understanding of the relationship with stakeholders and their control, first and foremost with contractual partners, employees, suppliers and customers, but also with social factors that may influence a company. For small and medium-sized companies this may be of crucial importance in terms of their survival. Therefore, it is not only profit, growth and employment that are the measures of success, but rather also quality inclusion in the environment in which a company operates.

The advancement of corporate governance may be a key element of renewed revival of investor trust, stability and growth of small or medium-sized enterprises. Everything that applies to large, listed companies also applies to small and medium-sized enterprises. This assumes the strengthening of transparency, publicity and access to information, and independent control of management. In addition, there must be institutional requirements: in a country there must be adequate conditions for improvement in the quality of corporate governance, that ensure that capital markets are effective, the justice system is efficient, that regulations are competent, that ensure political stability, access to reliable macroeconomic data, and to trained and experienced professionals in the role of managers and auditors.

To be precise, corporate governance provides space for the future expansion and sustainable growth of small and medium-sized enterprises. The basic values of transparency and accountability which are the cornerstones of corporate governance should be integrated into the business culture of small companies, and this shall certainly be a gain and benefit in the long run. Furthermore, this creates the preconditions for professionalization of management and better organisation of business activities.

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## **PRODUCT SALES INCREASE MANAGEMENT IN THE FUNCTION OF THE GROWTH OF PRODUCTION VOLUME IN WOOD INDUSTRY: CASE STUDY – COMPANY DRVO DOM**

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### **ABSTRACT**

*In modern business which always means fierce competition, the imperative of success is to be different and constantly increase the production of one product by increasing sale of other products. The biggest contribution to achieving these business performances is provision of a part of the profits that are generated through the sale of one type of product and investment in the production of other types of products.*

*The impact of the increase of one product on the increase of another one has become a special management discipline in the past few years. A lot of useful information about the significance of this issue can be obtained by analyzing available bibliography and researching business practices.*

*This paper provides a clear understanding of the impact of increasing the sale of one product on the increase of production of another product by explaining management role in the growth of production volume.*

*Case study methodology will be applied in wood industry, specifically in the case of company Drvo Dom.*

**Keywords:** *Investment, Management, Production, Sale*

### **1. INTRODUCTION**

By increasing the sale of one product a company can achieve a great profit and then invest in production of some other products. But can it both increase profits and achieve its goal which is to survive and develop? The increase in product sale is definitely a success for companies that keep increasing sale and invest further in the production of other products. (Kotter, 1998, pp. 37). Increased volume of sale certainly affects the production of other products, as the profits are invested in raw materials necessary to produce other products. Market is an extremely important factor for increasing sale. Product sales increase management and making a profit require the analysis of a company environment and competition. Then there has to be a clear idea of a product and how to make it. A product needs to both attract new customers and keep the old ones.

Sale volume can be increased by improving the quality of products and their packaging. Another way of increasing sale volume is by finding new ways of using products. Increased

production can be achieved by increasing investment in raw materials. Of course, the bigger the profit invested in the production of products, the more raw materials will be bought and more products will be made. Continuous production and increase in production means that the market accepts an increase in production and a need for products (Lewin, 1951, pp. 12). The production of some products may depend on the sale of other products, because if the sale of one product increases, then the profit can be invested in production of other products. There is a broad and narrow understanding of increased production. Production includes an entire life of economy and all its main segments: an increase in production, distribution and not just the work process in which simultaneously and directly performs purposeful spending of financial and subjective factors of production. Many companies are not even aware of the great influence of profits and investing these profits in the production which greatly contributes to creating even bigger profit. By making bigger profits a company can invest in raw materials which results in good and stable business and ensures a market position. When we increase the production of some products funded from increased sale of other products, we can point out that such company is extraordinary and that it successfully operates and applies a good strategy. Financial risks have to be well managed and it is very important for business. It is necessary to have the experience of other companies when it comes to investing profits. It is not easy to estimate how to invest the profits in production because of financial risks (Fernandez, 2006, pp. 25).

## **2. THE IMPACT OF INCREASING PRODUCT SALE**

Only a developed and successful company with a clear vision and mission can increase sale. Companies that manage to increase sale will certainly produce other products and invest in production. Increased sale of products carries a heavy risk because it is not certain exactly how much a sale will increase and whether it will increase in general. The importance of selling a product is reflected in the knowledge, experience and a good sale strategy and it means a lot to all companies, both financially and in terms of leadership because it is very important to invest in production of other products and have a competitive advantage in the market (Harvey, 2003, pp. 36). Product sales increase management definitely brings a success for companies. The impact of an increase in sale of some products greatly contributes to the increase in production of other products and thus an organization progresses in terms of production, even when it seems unlikely to manufacture certain products in greater quantities because of expensive raw materials. Organizations need to work hard and progress which means that an increase in sale cannot happen quickly but gradually from year to year and sometimes even from a decade to decade. It is vital that a company has a potential profit made by selling products that will be spent on producing some other product because all the profits must not be invested in the production of other goods. They need to be very rationally distributed. Simply, if a product does not sell easily, the price should be lowered or a company should find a new way to make a profit which is of great importance for survival, production and investment. The increase in product sale can also affect the price so if there is a great demand for some products and if customers buy them in great quantities, then the prices of these products may be different, simply higher. If a company still succeeds in selling some products despite the increased price, then it is successful, and it will steadily make more and more profit and increasingly invest in other products which is very important for an organization (Lown, 2001, pp. 14). The more profit, the more chances for production and for the progress of a company. By great increase in sale of products and investment to produce other products, companies build up their reputation or image. It is significant to make decisions wisely and use business strategies for operations concerning investments and increasing production. Companies try to make as much profit as

they can, because that is a vital for further development of both a company and all employees in a company, since the goal of every business is to survive and make progress and that can be accomplished only by good work and good assessments. Increased sale will certainly contribute to achieving the intended objectives of a company. It is not easy in today's turbulent times to maintain a high pace of increase in sale, therefore the management strategies and skills of experts will be of major importance for business. Companies must carefully select experts who are ready and prepared to do a good work and their knowledge should contribute to the development of increasing sale with the aim to create the greatest possible profit so that the company's business can become much better now and in the future. The increase in sale of products can greatly contribute to the welfare of companies but it does not necessarily mean that every company will invest in the production of other products wisely. This profit can be invested in something else. It is in the best interest of every organization to make the greatest revenue by selling products and produce as much as it can because this is the key to success. A lot of things can be accomplished by selling products. Selling products requires seriousness and kindness. Sellers, managers, negotiators and also all employees in the organization need to increase product sale and achieve increasing profits, and that means investing in production or investment in some innovations. Increased sale of a product can be characterized as knowledge and the ability of a company to assess its opportunities and weaknesses, which means whether you will be able to sell more products next month or the same amount as this month (Van den Heuvel, 2012, pp. 30). The increase in product sale is important and as increasing capital means increased sale and greater profits. Using alternative methods of sale, distribution and excellent communication can increase the sale of products greatly. The increase in sale is achieved through exceptional relationships with suppliers who cooperate and communicate in a good way. It is also extremely important to increase market share of a product. Market share is a percentage of total sale achieved by selling certain types of products or a particular product of a company, firm or organization. Sale of this particular product means it can be measured and recorded as a percentage of the total sale volume, or simply as a percentage of the total value of sale in a certain period. The share of the market, which is directly linked to profitability and therefore the increase of market share by a certain percentage, is of one of the most common ways to the increase sale. Coronil believes that the increase in sale is also achieved in the following ways (Coronil, 1997, pp. 21):

- The price increase (which results in increases of the value of sale)
- Reduction in price (if competitors are not able to do it)
- The introduction of additional sale channels and increasing sale through existing channels
- Intensive promotional activities
- Kindness of staff
- The application of a good strategy
- Experience from previous years
- Improving the quality of products
- Good advertising
- Collecting information
- Coalition of companies
- Innovations

Product sales increase management is certainly a demanding task and it is very important how and in what way a sale goes. The way we display goods will affect the increase in product sale, because in order to increase sale, the products need to be visible and in the right places. The increase of product sale is achieved by putting products in specific places. Displaying products is very important and it is the way that products are displayed that helps consumers to identify and purchase them and certainly tell other consumers about them. Sale volume can be increased with better quality and more appealing packaging. The volume of sale increase is achieved by finding the new ways of using a product.

Better distribution and diversity in supply also have an influence on the increase in sale volume. More effective control affects the volume and increase of products sale. Increased income depends on the net profitability. Because if net profitability declines or if the value of this indicator is lower than the average branch, a decision is made to increase the volume of sale (Van Caneghem, 2002, pp. 36). The increase in income leads to an increase in net profitability and increase return on total assets and improving profitability and increasing sale volume. Surely, increasing revenue and improving profitability, instead of increasing the prices, improving the quality of reliability and durability of product and innovation and differentiation of product result in a greater volume of sale.

The increase in sale volume was reflected in the personal and culture sale by direct sale. This method of selling is largely represented. Organizations need to understand the importance of sale and in fact how important it is to increase product sale because sale volume increases, creates and contributes to a significant and stable source of profit, which could certainly be used in a very competitive and global era in which organizations operate. An organization's policy should be widely represented and have clear goals about what they want to achieve, so it is essential to conduct research in psychological habits and swot analysis to recognize opportunities and threats of any increased sale of products. The increase in profits is the key part of whether a company will survive, develop and invest in the production of some products because only the companies with strong and good profits can invest more (Mauro, 1995, pp. 15). In order to increase the sale of a company, they must have an insight into how other companies do business and sell and whether they also have increased sale or not. Therefore, information is very important and a company should always be well and accurately informed about competitors. When everything is in place and when a company manages to increase sale of products, it is clear that, prior to an increase in product sale, its responsibility is to manage the sale in order to contribute to the overall goals of a company. Managing sale operations can be defined as analysis, planning, organising and control activities and power sale operations. It includes formulating strategy and structure of sale operations, recruitment, selection, training, awarding and supervision and evaluation of the sale staff in an organization. Increased sale are a huge success when it comes to the increase and strengthening finance. Planning an increase in sale is a very demanding job, and it includes a great responsibility. The process of planning the increase includes defining objectives and formulating strategies to achieve these goals because the main guideline is securing more sale. It is vital to prepare plans for the future and the development as the key to success lies in a good organization within each company. The availability of information can definitely affect the sale increase because the more information a company has, the greater are the chances that it will have an insight into competitors but also what that consumers want and what they need. So if a company has an insight into consumers' desires, it will certainly start with the increased production in order to meet the needs of these consumers and perhaps attract some new customers and retain the old ones. Increasing sale is an exhausting job, which should be precisely and carefully approached. The vision and mission of a company leads to important decisions and the appropriate strategies are used to achieve the goals which will contribute to the development.

### 3. THE IMPORTANCE OF INCREASING PRODUCTION

Increased production is very difficult to achieve so it is necessary to have a good strategy of how and in what way it can be done. Good analysis of the environment and knowing how to increase sale certainly results in success on the market. High profits and finances simply must be calculated so as not to jeopardize business and the image of a responsible organization. Continuous production and increase in production means that the market accepts the increase in production and there is a demand for products which is important for a progress (Harvey, 2003, pp. 20). Increasing production of raw materials is of great importance. When raw materials are purchased, the decisions of management are very important. It is crucial how much profit will be invested in it. The transportation of raw materials is also important, as well as machines and technology and the storage of raw materials. All of those things must be included in the cost of production and increase in the production of some products. The method of increasing production of products is a very responsible task that can be done on the basis of previous experience. When the production of a product increases, it is essential to maintain the continuous production flow, improve skills and acquire new knowledge about how to increase production of a product (Fernandez, 2006, pp. 41). The actual income is significant for increasing production of a product but the disposal of these profits according to the rules of developed business should also be taken into account. The sale of some types of products and increase in revenue can be invested in production of other products, but managers must bear in mind that part of the profits is left for production of one type of products. Production includes the entire economic life and all its main segments: the increase in production, disposition and not just the labour process (Lewin, 1951, pp. 25). Increasing production implies increased activity in making items. Only a strong financial injection may increase the production. Increasing production means increasing the chances of employing people. It can contribute to the progress of a company and improve the prospects that a company develops, becoming more recognizable in the market and fulfilling the wishes of consumers and employees within the company, which is very important nowadays.

The increased production includes increasing chances for promotion of organizations not only in one city but sometimes in several countries. Profit is equally important to the increase the production as is the management, which includes the process of planning, organizing, and controlling production functions. It is very important that the management increases production because managers task is to ensure quality, and above all, a good production. Increased production is good if there are quality investments in production, but only high-profit organization. Companies should observe which products sell well, so if they bring great profits, they should definitely invest in the production of other products to increase the chance of progress and success (Fernandez, 2006, pp. 17). The production can be improved by better use of capacity or new capacities. The increase in the rate of profit is achieved by reducing the per-unit cost of production or, more precisely, rationalization of product functionality. Rationalization can be performed by optimizing the amount of scrap production, purchasing new, improved or cheaper raw and semi-finished materials or by ordering functional layers or equipment. Because of the reduction in the cost per unit machines are replaced every three to five years in developed countries, although they are technically entirely in a good condition and that certainly affects the increase in production. This is very important and the optimization of production as a result of planning between the minimum cost and maximum income, with the need to find a point where the greatest profits are. The great benefit of this provides operational mathematical models used for solving partial problems. One way of increasing the production is a wide use of basic resources. Individual production is the kind of increase in the production of unique products and the manufacturing of these products takes a little longer but

it is more and more present in the world. The individual production is an intensive labor activity, because many jobs cannot be mechanized or mechanization is unprofitable. Machines and equipment are universal but it does not prevent anyone from making greater income and more inputs in the production of a product. In this type of production, workforce is qualified, more precisely, highly qualified, which is quite logical, because there is often a need for different problems to be solved in different products. When it comes to the increase in individual production, the problem is planning precision because products differ. The increase of automatic production is the highest form of organization. The characteristics of the increase of automatic production are the following: production processes are performed by robots and automatic machines, jobs are related to the creation and usage of certain software used to manage technical and technological processes, the participation of labour force, total investment is reduced to a minimum, part of the costs is spent on material and amortization of tools and because of high productivity and the possibility of mass production, the cost per unit of output is lower than for other types of production (Harvey, 2003, pp. 33). To increase production means to understand the market and what is still the most important - it means to survive and understand the importance of modern business. Production may be increased in various ways but it is essential to invest money in a production.

#### **4. CASE STUDY – COMPANY DRVO DOM**

The company DRVO-DOM manufactures a variety of wooden products. It is located in Smederevo, Serbia and it started working in 2005. Nowadays, the wood products are present in households and hence the idea for the name DRVO-DOM (DRVO means wood and DOM means home). All the products made by this company are called the same as the company. DRVO-DOM is a medium company and employs 70 people. It consists of one hall with machines and three offices, one for the CEO, one for the accountant and one for negotiation and communication. The company DRVO -DOM has been operating successfully for ten years and from year to year it increases the sale of kitchen boards, thereby creating bigger and bigger profits, and it invests the part of that profit in manufacturing wooden baskets. Since the company makes more profit each year, it increased purchases of raw materials and significantly increased its production of wooden baskets.

*Table following on the next page*

The year of sale	Type of product	The price of product per piece in RSD	The products sold per piece	The income in RSD
2005	Kitchen board	50	2,924	146,200
2006	Kitchen board	50	3,499	174,950
2007	Kitchen board	60	5,382	322,920
2008	Kitchen board	60	7,525	451,500
2009	Kitchen board	70	7,992	559,440
2010	Kitchen board	70	11,818	827,260
2011	Kitchen board	70	14,638	1,024,660
2012	Kitchen board	80	16,608	1,328,640
2013	Kitchen board	80	18,329	1,466,320
2014	Kitchen board	90	22,677	2,040,930

*Table 1: The data on Kitchen boards (Company Data)*

The year of production	The type of product	The quantity of produced products in pieces
2005	A wooden basket	549
2006	A wooden basket	1,811
2007	A wooden basket	3,570
2008	A wooden basket	6,350
2009	A wooden basket	8,792
2010	A wooden basket	13,829
2011	A wooden basket	17,190
2012	A wooden basket	17,480
2013	A wooden basket	19,109
2014	A wooden basket	27,031

*Table 2: The data on wooden baskets (Company Data)*

Table 1 shows that the sale of kitchen boards was growing from year to year which contributed to even greater profits. And according to Table 2, it can be concluded that the production of



wooden baskets was growing because by selling boards, they made more profit and the part of the profit was invested in the production of baskets. Table 1 shows that at 2005 the income from the sale amounted to 146,200 dinars. Part of that money was invested in the production of baskets and in the same year 549 pieces were produced. In 2006, the production of boards increased and the profit was 174, 950 dinars. Again, part of the profit was invested in raw materials for making baskets and increasing baskets production so, Drvo Dom counted 1,811 pieces, 1262 pieces more than in the previous year. In 2007, management decided to rise the price of kitchen boards, still with growing selling rate for kitchen boards, and consequently they earn greater profit (322,920 dinars) and produced 3570 wooden baskets. When it comes to the year 2008, there was the sale increase and the profit of even 451,500 dinars which enabled an increase in the salaries of employees and investment in increasing production of baskets, which resulted with 6.350 pieces, almost twice as much compared to the previous year. Product sales increase management in the function of the growth of production volume was conducted in the coming years as well, and in 2010 company managed to open new work places. Company managed to keep steady progress and for example, in 2014 the increase in sale of the boards brought the greatest profit of 2,040,930 dinars, and finally the money was again invested in further production so the number of baskets reached 27,031 pieces.

## 5. CONCLUSION

Companies use various strategies in order to increase product sale and increase profit. They can choose to cut costs while trying to maintain volume, or they can cut production costs and transfer the savings to buyers hoping to increase sales volume enough to rise profit. Growth capital is ideal for companies focused on product development. This paper has shown the management strategy of increasing sale of some products (and logically achieving higher profitability) and investing part of the profits in raw materials. The research conducted for the purposes of this paper confirmed that the increase in sale of some products (kitchen boards) is very important for the investment in increase of the production of some other products (wooden baskets). The hypothesis about interdependence between product sales increase management and the growth of production volume was confirmed on the case example, company DRVO-DOM. Investing in new product development is crucial for all businesses aiming to grow and keep product life cycle longer.

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## ADVANTAGE AND AIM OF QUANTITATIVE ANALYSIS FOR MAKING BUSINESS DECISIONS IN LIBYAN IT COMPANY

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### ABSTRACT

*ICT, especially Internet, brought incredible changes to our lives. Rapid development and involvement in every part of society is achieved from beginning of 21<sup>st</sup> century, very fast it become the global need. The impact of ICT is widespread and will affect all: individuals, businesses, and governments. There is a need for constantly monitor these changes and impacts so it could be included timely, where it can bring improvement and better performance results, and provide competitiveness on the global market.*

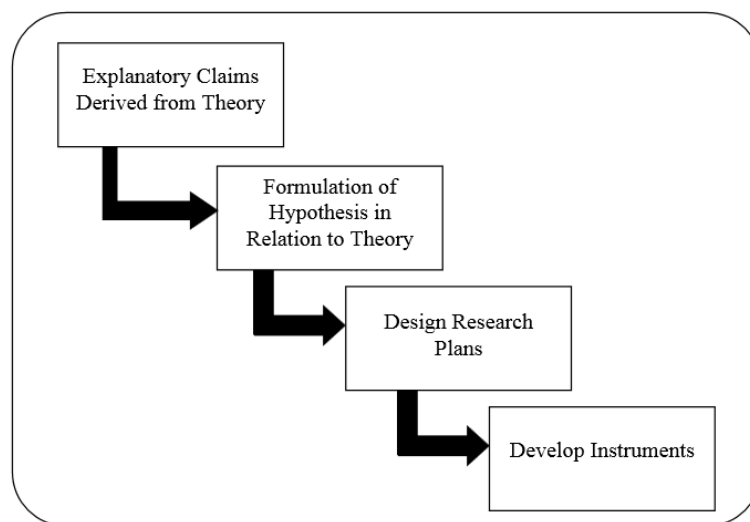
**Keywords:** *businesses, global market, governments, performance*

### 1. INTRODUCTION

Internet markets in the Arab countries are still in phase of development. The one of the reasons is poor infrastructures in the region and low levels of competition. These factors are largely influenced by the negative attitudes toward the Internet by regional governments. Because the Arab governments dictate the rate and type of economic progress in their countries, the benefits of the Internet being recognized across the entire region is substantial. Despite the culturally reserved approach to the Internet, the penetration rate of ICT, especially Internet in Arab countries is at the high level. Great interest in the way of IT development occurred after Arab spring that affected these countries. It is important for organizations to develop and support IT innovations and to adopt Internet technologies. Management Information Systems (MIS), such as accounting information systems, human resources information systems, enterprise systems, and enterprise-wide information systems assist in producing reports for decision making. This is particularly important for most organizations in different industry sectors in Libya. It improves the organizations ability to communicate and compete with organizations worldwide. It also allow it to operate on an global level and provides a cost-effective way for organizations to identify potential business partners, gather information, improve communications, launch new products, and stay competitive on global market. The goal of this analysis is to provide the answer to the question of how inflow of foreign capital can influence the development of IT sector in Libya, especially the existing problem of poor distribution of Internet and mobile network. And on the base of that to evaluate the risk of possible decision of Libyan government in changing owner structure of IT sector in Libya. For this research we will use quantitative methods for analysis. Quantitative analysis can be done for a lot of reasons such as measurement, performance evaluation or valuation of a financial instrument. It can also be used to predict real world events such as changes in a share price.

## 2. QUANTITATIVE ANALYSIS

In the business performance analysis important step is quantitative methods. These analyses are made for analyzing and improving processes in the examined organization. It provides a powerful modeling and analysis tools to determine the effects of various parameters on performance indicators of BP. Quantitative analysis is measuring certain behavior, action, or achievement and uses statistical analysis to come to the results which can focus our action in the way of making changes in business performance. Quantitative research uses structured questionnaires with mostly closed questions where the respondents select their answers from given lists of possible responses. A range of question types may be used. For example, rating questions can measure strength of feeling such as importance or satisfaction, ranking questions can determine preferences, and so on. Because of its statistical nature, sample size is important for quantitative research. Thirty is generally held to be the minimum number of responses for any area of interest although a larger sample size will produce more reliable data. Presentation of the results and findings are supported by tables and graphs. From this sort of analysis we can get reliable information about our research subject because the data that are based mainly on the high value of having easily measured numerical data collected from large sample. This analysis uses simple and cost-effective data collection formats to gather information that can show an insightful influence on the future decisions of an organization. It is considered for a very reliable determinant of success in business and other fields. It is used for periodically repeated analyses, because the data can be saved and compared in required period of time. Replicated and generalized consumer study can be repeated at regular intervals to keep data up to date and accurate. To monitor development of product or service improving or falling down with set standards, over weeks, months, or years, similar testing tools and procedures are used repeatedly by the quantitative analysis. Moreover, this analysis technique gives timely and continuous data collection that can be used for various products and services. Above all, quantitative research formats into statistical data that can be interpreted easily thus providing a global marketing appeal. A comprehensive analysis of a company should include looking at both the qualitative and quantitative factors that would impact decision making.



*Figure1. Quantitative Research Process*  
(*"Italian Company to Install Fiber-Optic Network," Libya Business News, September 29, 2012*)

### 3. DIFFERENCES BETWEEN QUANTITATIVE AND QUALITATIVE ANALYSIS

From perspectives of investors it is important to provide both a qualitative and a quantitative perspective. Qualitative analysis means to look at the intangibles assets. The factors about a company that are not only numerical data can be as important as analyze numbers. "Qualitative methods are therefore more suitable when the objectives of the study demands in-depth insight into a phenomenon". Qualitative research follows a semi-structured discussion guide to ensure that all topics under consideration are covered and that the discussion stays relevant.

The most commonly used qualitative approaches are focus groups and depth interviews.

- Focus groups (also called group discussions) normally comprise five to eight participants brought together to discuss a number of topics, guided by a moderator. The dynamics of the interaction between participants is an important feature of a focus group.
- Depth interviews are one-on-one interviews conducted by telephone or face-to-face. The more intimate environment allows participants to talk openly and is particularly appropriate where participants are competitors who would not agree to come together in a focus group.

We can conclude from what we find out in above text that quantitative data is information you can objectively count, see or rank. Examples include sales figures, websites traffic statistics, financial reports and employee retention rates. Qualitative data consists of subjective assessments you make. For example, you can project demand for your product and future sales using input from your sales people and discussions with customers. You might use focus groups to test different advertising ideas. A quantitative analysis is an objective measurement, as opposed to a qualitative analysis, which is a more subjective in making conclusions.

### 4. COST-BENEFIT ANALYSIS

A cost-benefit analysis is a common type of business decision-making tool that involves quantitative reasoning. In a cost benefit analysis, managers decide the best course of action out of two or more possible courses of action by attributing values to the expected benefits of different courses of action and comparing those values. For example, if a company is trying to decide whether to spend its money on launching a new product or spending more toward advertising current products, it might conduct a cost-benefit analysis to estimate how much profit it could expect from each course of action and then choose the course that is expected to produce more profit. A cost benefit analysis is used to evaluate the total anticipated cost of a project compared to the total expected benefits in order to determine whether the proposed implementation is worthwhile for a company or project team. If the results of this comparative evaluation method suggest that the overall benefits associated with a proposed action outweigh the incurred costs, then a business or project manager will most likely choose to follow through with the implementation. Generally speaking, a cost-benefit analysis has three parts. First, all potential costs that will be incurred by implementing a proposed action must be identified. Second, one must record all anticipated benefits associated with the potential action. And finally, subtract all identified costs from the expected benefits to determine whether the positive benefits outweigh the negative costs.

- **Identifying Costs** The first step is to identify and quantify all costs associated with a proposed action. In order to successfully identify all potential costs of a project, one must follow the subsequent steps.

- ✓ Make a list of all monetary costs that will be incurred upon implementation and throughout the life of the project. These include start-up fees, licenses, production materials, payroll expenses, user acceptance processes, training, and travel expenses, among others.
  - ✓ Make a list of all non-monetary costs that are likely to be absorbed. These include time, lost production on other tasks, imperfect processes, potential risks, market saturation or penetration uncertainties, and influences on one's reputation.
  - ✓ Assign monetary values to the costs identified in steps one and two. To ensure equality across time, monetary values are stated in present value terms. If realistic cost values cannot be readily evaluated, consult with market trends and industry surveys for comparable implementation costs in similar businesses.
  - ✓ Add all anticipated costs together to get a total costs value.
- **Identifying Benefits** The next step is to identify and quantify all benefits anticipated as a result of successful implementation of the proposed action. To do so, complete the following steps.
    - ✓ Make a list of all monetary benefits that will be experienced upon implementation and thereafter. These benefits include direct profits from products and/or services, increased contributions from investors, decreased production costs due to improved and standardized processes, and increased production capabilities, among others.
    - ✓ Make a list of all non-monetary benefit that one is likely to experience. These include decreased production times, increased reliability and durability, greater customer base, greater market saturation, greater customer satisfaction, and improved company or project reputation, among others.
    - ✓ Assign monetary values to the benefits identified in steps one and two. Be sure to state these monetary values in present value terms as well.
    - ✓ Add all anticipated benefits together to get a total benefits value.
  - **Evaluate Costs and Benefits** The final step when creating a cost benefit analysis is to weigh the costs and benefits to determine if the proposed action is worthwhile. To properly do so, follow the subsequent steps.
    - ✓ Compare the total costs and total benefits values. If the total costs are much greater than the total benefits, one can conclude that the project is not a worthwhile investment of company time and resources.
    - ✓ If total costs and total benefits are roughly equal to one another, it is best to reevaluate the costs and benefits identified and revise the cost benefit analysis. Often times, items are missed or incorrectly quantified, which are common errors in a cost benefit analysis.
    - ✓ If the total benefits are much greater than the total costs, one can conclude that the proposed action is potentially a worthwhile investment and should be further evaluated as a realistic opportunity.

## 5. INFORMATION COMMUNICATION TECHNOLOGY (ICT)

Advanced ICT are devices:

- that transmit, manipulate, analyze, or exploit information, and
- in which a digital computer processes information integral to the user's communication or decision task.

Examples of ICT are electronic mail (e-mail), conferencing technologies, electronic bulletin boards, file transfer, collaboration technology (e.g., group support systems), shared electronic databases, electronic data interchange, the fax, voice mail and the telephone.

There are very important characteristics ICT:

- **Local:** Geography and local context are becoming important. ICT provides an effective medium for linking people and objects (and processes) with local environments. This will allow differentiation across local contexts and the provision of tailored services.
- **Intelligent:** ICT will become even more intelligent. People's behaviors, individual preferences, and object interactions among other elements will be more easily stored, analyzed, and used to provide intelligent insights for action.
- **Mobile:** The wide adoption of the mobile phone has already brought ICT to the masses. Advances in hardware (screens, batteries, and so on), software (e.g., natural language interfaces), and communications (e.g., broadband wireless) will continue to make computing more mobile and more accessible

firms with well-developed management information systems lend themselves to a move towards flat structures.

## 6. TELECOMMUNICATION SECTOR IN LIBYA

Libya is adopting new organizational policy that should lead to improvement of business performance including adoption of ICT, decision making process, communication and other aspects. Modern telecommunications systems are an essential element for Libya to be able to adopt and use the technology. Without suitable telecommunications system and good networks, the innovation of IT would be very difficult to achieve. The telecommunication network in Libya had a capacity of 400,000 lines in 1995. In 1996, the number of connected telephone lines was approximately 380,000, resulting in a telephone density of 6.79% per hundred people. Mobile cellular telephone systems became operational in 1996 with limited access and coverage. Modernized since the launch of LTT, and LTT now offers high quality services to people in most parts of Libya.

## 7. IT COMPANIES IN LIBYA

- **Libyan Post and Telecommunications and Information Technology (LPTIC)** holding company that controls Libyana, Almadar, Aljeel Aljadeed Company, Libya Post Company, Hatif Libya Company, LTT, Libya International Telecom Company and Albunya Investment and Services Company.
- **Libyana** Libyana started its GSM mobile services in September 2004, and quickly achieve success in the market by providing extensive network coverage in all key areas throughout Libya. Continues offering of value added services, and its introduction of 3G services in September 2006, a first in North Africa, has pushed Libyana to market leadership in Libya. Libyana enjoys a dominant position with a market share of around

72 to 73% of the whole market, data and voice. The number of active subscribers that Libyana reached in 2013 is more than 4 million active subscribers.

- **Almadar Aljadid** is the second largest mobile operator in Libya. Provides mobile services.
- **Hatif Libya Company** The company has been established upon a decision from the Secretary of the Board of Directors of LPTIC, No. (4) for year 2008, for purposes of operation and maintenance of the state systems and the development of a national phone network. This includes the local systems represented in the transit switchboards, secondary switchboards, connection parameters within cities, and providing all services to subscribers, as well as any other complementary activity in order to achieve its objectives. The company endeavors to contribute in building the society economy through the works it provides and through maintaining the values, principles and exemplars of the society.
- **Libyan International Telecom Company** The Libyan International Telecom Company is one of LPTIC subsidiaries, established in 2008 to take over the management of all ports, international contacts in Libya and to meet the needs of the international communications of the other subsidiaries, whether telephony or data services.
- **LapGreen Networks** Launched in February 2007, GreenN (also known as LAP GreenN) is a provider of total communication solutions and a wholly owned subsidiary of the Libyan African Portfolio (LAP). GreenN offers quality mobile and fixed voice, data, Internet and business continuity services to customers across its operations in East and West Africa.

"We want to promote the private sector, we want to make sure that this telecom law is up to the international standards and we want to make sure there is an independent regulator because the monopoly from the previous regime was very strange and decisions were being made and licenses given all from the same place," said Usama Siala, Minister of Communications and Informatics of Libya.

## 8. CONCLUSION

It is made draft law and it is in the General National Congress for a review, but the timetable for enactment is uncertain. Until its adoption Libya telecoms continues to be under a monopoly arrangement at government ownership. Once the new law is passed the minister wants to see a new "third operator" that will not just serve the country's four main cities, but provide service throughout Libya. Internet ie., social media in Libya had a great influence in revolution. Facebook, Twitter and YouTube brought much news of the revolution to the world audience. As in much of the Middle East, FB is a favorite medium for exchange information, making connections and acting as an instant commentating system on the news of the day.

LTT (Libya Telecom and Technology, the first and main Internet Service Provider (ISP) in Libya, started in 1997), is focusing on the mass market providing two main services here: WiMAX and ADSL. This company is expanding these two services over the whole of Libya. It reached the number of 200,000 subscribers for WiMAX and almost 100,000 subscribers for ADSL. The goal of its progress is to increase the number of internet subscribers in Libya by another 300,000 based on their network capacity. By getting 400,000 new subscribers it will be available at more affordable rates compared with elsewhere in the continent. Obviously this level of forecasting can only be made in respect of developments that have already appeared on

the radar. It is very hard to make predictions in this way without at least a conceptual development being in place. Our aim is to deliver high-level strategic information on key industry and market developments in conjunction with market analysis, so we can evaluate the possible decision that Libyan government could made.

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## **Entrepreneurship between Creativity and Bureaucracy**

## CONTRADICTION BETWEEN EMPHASISING CREATIVITY IN THEORY AND STIFLING IT IN PRACTICE

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### **ABSTRACT**

*The word "creativity", like other frequently used and popular words, is at risk of becoming a vague platitude or a slogan devoid of its conceptual determination. The knowledge and understanding of the phenomenon of creativity is not proportional to how much it is affirmed and promoted nowadays. This is particularly noticeable in work organizations of all kinds. Besides the subjective factors as are the employers' and managers' superficial or inadequate knowledge of what creativity really is, there are objective factors which put pressure on and hinder the creative impulses and processes. Economic, financial and market imperatives such as: fierce competition, short-term goals and deadlines, acceleration of work processes, rationalization, productivism, overall quantification (only measurable parameters and results being taken into account), excessive regulations, tight control systems and the like, contribute to design organizations which crush creativity. Some quite widespread management practices and behaviors, especially the so-called intrusive or micromanagement, are often a reaction to these constraints. As for the employees, they internalize all these pressures into strong inner imperatives of (over)achievement. The imposed standard of a constantly high level of motivation, excellence and self-improvement is unsustainable in a long run. The guiding management principle of performing more and better for less (time, resources, energy, leads to the exhaustion of mental and other psychological resources needed for creative ideas to emerge and develop. Creativity involves complex, subtle and dynamic psychosocial mechanisms. Too often the managerial practices and organizational cultures are detrimental to the well known most powerful source of creativity: the intrinsic motivation. Briefly, this article deals with the paradox which lies in the fact that, in theory, so much emphasis is put on creativity and innovation as indispensable assets, while at the same time so much is done to stifle them in practice.*

**Keywords:** *Creativity, Innovation, Intrinsic Motivation, Micromanagement, Organization*

### **1. INTRODUCTION**

The word "creativity", like other frequently used and popular words, is at risk of becoming a vague platitude or a slogan devoid of conceptual determination. The knowledge and understanding of creativity is not proportional to how much this phenomenon is affirmed and promoted nowadays. This is particularly noticeable in work organizations of all kinds. Besides the subjective factors which include the employers' and managers' superficial or inadequate knowledge of what creativity really is, then their personal profile, general interpersonal and specifically management style and behavior, there are objective, factors which put pressure on and hinder the creative impulses and processes. Economic, financial and market imperatives such as: fierce competition, short-term goals and deadlines, acceleration of work processes, rationalization, productivism, quantification (only measurable parameters and results being taken into account), excessive regulations, tight control systems and the like, contribute to design organizations which crush creativity. Some quite widespread management practices and behaviors, especially the so-called intrusive or micromanagement, are often a reflection of these external factors as well as a reaction to them. As for the employees, they eventually internalize these pressures turning them, often unconsciously, into strong inner imperatives of

(over)achievement. The imposed standard of a constantly high level of motivation, performance and self-improvement is unsustainable in a long run. The guiding management principle of achieving unrelentingly more and better for less (time, resources, energy) leads to the exhaustion of mental and other psychological resources needed for creative ideas to emerge and develop. Creativity involves complex, subtle and dynamic psychosocial mechanisms. Managerial practices and organizational cultures are too often detrimental to the well known most powerful source of creativity: the intrinsic motivation.

Eminent researchers of creativity concluded that contrary to popular opinion, to be creative doesn't imply a certain type of personality according the way different psychological theories classify personality types. Rothenberg states emphatically: "Only one characteristic of personality and orientation towards life and work is being absolutely expressed in all creative people: motivation." (Rothenberg, 2010: 17). As the topic of the article is creativity in the organizational context, and (according to Rothenberg and many other researchers) the most powerful driving force of creativity is the intrinsic (internal) motivation, the following section will be devoted to this issue.

## **2. INTRINSIC MOTIVATION AND SELF-DETERMINATION THEORY**

The theory of intrinsic and extrinsic motivation relies on Deci and Ryan's theory of cognitive evaluation. (Deci, Ryan, 2000). Their basic hypothesis is that intrinsic motivation arises from innate needs, which every man possesses to a greater or lesser extent, namely the need for competence; relatedness and self-determination (or autonomy). According to this theory, the motivational process depends on all personal and contextual factors that may affect these needs. First, the need for competence means the desire to control and master the environment and outcome.<sup>131</sup> We want to know how things would turn out and the results/consequences of our actions. This ability develops by the accumulation of knowledge and experience during various interactions with the environment, but also from within the power of the human need for this interaction. Erih Fromm ranks this need, which he calls the need for effectiveness, among eight basic human needs and he equates it with the need to feel accomplished. (Fromm, 2003). The need for relatedness deals with the desire to interact with, be connected to, and experience caring for other people. Our actions and daily activities involve other people and through this we seek the feeling of belongingness. The need for autonomy concerns the urge to be causal agents and to act in harmony with their integrated self. However, Deci and Ryan stated that to be autonomous doesn't mean to be independent. It means having a sense of free will when doing something or acting out of our own interests and values.<sup>132</sup>

Regarding the topic of creativity and the internal and external factors which encourage or discourage it, we find that it is best explained by the Self-Determination Theory (hereinafter referred to as SDT).

### **2.1. Self-determination theory**

"SDT develops an integrative approach to the delicate issue of the work motivation by linking the inherent needs of growth to the active nature of man, which (provided normality and favorable environmental conditions) tends to develop an autonomous regulation style of behavior as well as integrate life experiences and personal dispositions in a coherent self system. The theory considers the cases of excessive external pressures, which lead to the

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<sup>131</sup> What is Self-Determination Theory? <https://positivepsychologyprogram.com/self-determination-theory/>. Posted on 24.12.2014

<sup>132</sup> Ibidem

frustration of basic needs of growth and to the development of controlled motivation or state of amotivation. The assumptions of this theory have been tested in a number of domains such as learning, work, sport, intimate relationships, pro-social behavior and many others..“ (Majstorović, 2008: 5). The proponents of this theory analyze the connection between the self and the feelings of self-determination and competence. The central hypothesis of SDT is that individual behavior is motivated by one's need to feel competent and be the cause of his/her own actions and behaviors. It refers to a framework of analysis in which three theories intersect: the theories of cognitive evaluation, of causal orientation and of self-integration. .

In order to satisfy his/her need for self-determination, the individual seeks to gain a sense of inner causality or internal locus of control, that is to feel that he/she is the cause of his/her actions. Creative individuals have a strong internal locus of control. When they can keep the internal locus of control, they perceive their work environment positively, as a context that supports and encourages their autonomy, which in turn strengthens their inner motivation. Therefore, although we refer to internal needs and motives, it is clear that situational factors play an important role in stimulating intrinsic motivation. But any inappropriate and ill-advised interference of external factors, such as excessive control, competition, deprivation of autonomy, unrealistic expectations, objectives and deadlines and other pressures (even reward predictions and expectations in terms of enticements) overturn motivation into demotivation. So the secret is in a thoughtful and careful use of appropriate external motivators, as means in the service of intrinsic motivation.

“SDT is the only theory which uses the constructs of intrinsic and extrinsic motivation, and describes the process of transforming one into the other. One type of motivation that occurs at the transition between the spheres of extrinsic and intrinsic motivation on the continuum of self-determination is the autonomous extrinsic motivation (AEM; Gagné, Deci, 2005). AEM refers to one's willingness to perform the tasks he/she considers important for his/her own goals or values. It is very important to note that these are tasks that the person has not set herself, but that they have been assigned from outside. However, if the objective to be achieved by the task is being integrated into the personal goals and values of the performer, the supporting work behavior will become regulated by personal values and goals and it will become important as a source of intrinsic satisfaction for the person.“ (Majstorović, 2008: 13)

### **2.1.1. Autonomy and organizational constraints**

Since we have selected autonomy as one of the three essential components of intrinsic motivation, knowing that this is the key factor of creativity, we need to point out the tense, even conflicting relationship between the need for autonomy and belonging to a work organization.

Autonomy in the organizational context is defined as the ability of an entity (individual or collective) to freely determine the rules of activities to which it is subjected, to fix the precise modalities of its activities within the area of its operation, without someone from the outside (here, a formal organization) imposing its own norms. (Chatzis, 1999: 29). The employees' autonomy doesn't belong to the corpus of human rights: when someone consents to an employment he/she renounces, implicitly or explicitly, a portion of his/her freedom, at least for as long as he/she intends to respect the contract and receive in return a salary in accordance with his/her qualifications and investments. (Perrenoud, 2000).

However, what seems obvious *de jure*, is not the case *de facto* in social relations. Deep down employees are aware that accepting employment contract they have deliberately alienated a part of their freedom. However, they constantly forget this and tend to benefit on all plans,

sometimes at the cost of a bad faith or a very subjective perception and reconstruction of what is legitimate. On the other side, the employers want to control all the professional procedures and activities, but deep down they know - even if they firmly believes in the scientific organization of work - that the production depends on workers' initiatives and autonomous *bricolages*. Thus there is the paradox that autonomy - which has been partly conquered *against* the organization - is at the same time the condition of the good functioning of the organization. (Perrenoud, 2000). One of the definite findings of the researchers' studies on the effective functioning of highly rationalized industrial organizations is the observed discrepancy between the standard (required by the organization) and the situated action of the operator (and the team); between the prescribed work (job preset by the design engineer) and actual work. This gap, in which the autonomy of actors fits, can be read either as an act of resistance (of ownership and assertiveness) against the order of the organization, or as an act of taking charge of the formal organization which, overwhelmed by the eruption of unpredictable elements, is unable to tell its members what they should do in each case, or as a mixture of both (Chatzis, 1999: 29).

The inevitable and ever-present tension between the need for autonomy and organizational constraints doesn't mean that there are not ways to manage it successfully in order to motivate employees to be creative. On one hand, it presupposes that this tension is not denied and is not a taboo and that the organization doesn't harbor the illusion of a harmonious unity of the organization's and employees' needs and interests. On the other hand, it demands a more flexible control system and trust based on results rather than on imposing the ways how to achieve them.

Since the need for self-determination, autonomy and a strong internal locus of control are the foundation of intrinsic motivation for work in general, and especially for creative work, it is clear that every unjustified pressure, coercion and control destroys this motivation. The harmful consequence of inappropriate control over the processes by which different individuals realize their tasks is that the creative impulse, which involves taking initiative and risk, freedom of research (also meaning the freedom to make mistakes) withdraws and hides beneath the surface. This particularly affects creative individuals, the same ones who are sought by organizations because of their creativity and who, by their nature, have a pronounced tendency towards autonomy, individualism and non-conformism.

After almost sixty decades of MacGregor's criticism of the management style based on the "Theory X" (1960), it is still widespread under a new label: micromanagement.

### **3. MICROMANAGEMENT: THE NEW FACE OF THE X THEORY**

Let us remind briefly the essence of MacGregor's theory (1960). The "Theory X" is based on the postulate that most people have an innate aversion to work and strive to avoid it in every possible way. People work only because they have to. This implies that employees should be treated as "donkeys", with "carrot and stick" to produce results. It is necessary to coerce and control them and resort to threats and sanctions, as the expectation of reward is not a sufficient incentive. Given that people are essentially immature, devoid of ambition, unable or unwilling to take responsibility for their work, they should be actively managed. The "Theory Y" is a completely opposite view. Its basic premise is that human beings, by nature, have a psychological need to exercise their psycho-physical and social skills in work. Moreover, they like to have responsibility, as it allows them to express and realize their personality and potentials (the innate and universal need for competence or effectiveness mentioned before). The working man is an adult, able to take an interest in what he does and to participate actively

in the objectives and activities of his organization, not only for economic, utilitarian reasons but also because such participation coincides with his own hedonistic goals. The management style which emerges from this understanding of the human's nature is opposed to the type of management characteristic of the traditional X organization. However, it seems that this tradition is very resilient, as it continues to live and flourish under the guise of new forms, despite the litany of its shortcomings. "If Micromanagement is such a Discredited and Flawed Management Style, Why do so Many Practice it?" is the title of an internet article, and the subtitle states that micromanagement is the least admired but most applied style of management. Before we come back to the answers suggested in this article, we'll rely on the following insights of another author, Yves-Pierre Gomez.

In the interview titled: "All Under Pressure: How Companies Killed the Added Value of their Employees with Great Blows of Intrusive Management", Gomez (2014) says that work is a modality of humanization. Work is more than a mere factor of production among others. It is both the means of ensuring the economy and a vector that produces more or less humanization. Therefore, we must consider it both from an economic and anthropological point of view. That is why work cannot be reduced to its mere results. The neoliberal economic theory has served its time, because by asserting that every individual is seeking his/her own interest, one has to build increasingly complex organizations to make egocentric individuals work, communicate and consume. As the neoliberal theory holds that the actors are opportunistic, i.e. that they serve only their own interests, the more companies give a supposed autonomy to the actors the more they are implementing control and monitoring systems. It is an elementary principle, the more the actor is supposed to be autonomous and searching for his own interest, the more the social structure is governed by very strict rules.

The undeniable progress in reducing the objective penibility at work was also accompanied by a regression. By reducing work time, as well as its constraints through the use of machines, the work content has been greatly intensified. To deliver a result quickly, ensure fast performance became the contemporary denominators of work. We work less in time hours, but these worked hours are much more intense than in the past. It is very demanding and stressful, because the body, mind, and nerves are continuously under a high tension. The intensification of work has been further increased tenfold by new technologies which have multiplied the possibilities of access to networks, multitasking, hypermobility and therefore continuous solicitations, at any time. The result is the paradoxical feeling of lacking time and still being overloaded and unable to deliver work on time. This dual pressure is the source of tensions that can lead to burnout, that is to say the sudden collapse of the employee's energy.

Since the 1990s and the financialization of the economy, the production systems have turned to the achievement of performances objectively evaluated by profit. This led to the reduction of work to its contribution to the realization of a profit. Reporting systems, control and management standards have increasingly abstracted the material reality of human activity in companies, detecting only one's participation in the creation of value in terms of financial profits. The content of work has become less important than the financial results it produces. Thus, its anthropological dimension went by the wayside. The fact that any work is carried by a subject, a human being who by working produces himself - as a craftsman realizes and asserts himself by making his object - this truth is ignored and discarded. The more work is made invisible, the more people are demotivated. (Gomez, 2013). Furthermore, the control system inhibits the capacities of action and creativity. The more the control is tight, the more people will exercise their talents elsewhere. And the more they exert their talents elsewhere, the more the company is under pressure, so the more it increases the control. It's a vicious circle. It ends

up in doing the minimum possible and wealth is created elsewhere. Thus, value creation can escape now because people do elsewhere what they are prevented from doing in their job. (Gomez, 2014)

Of course, if a greater consideration of the individual at work is desirable, it would be naive to be indignant that a company thinks and acts according to financial and utilitarian goals. Managers are bound to reason from this perspective. They have to fill tables and reports, to achieve objectives and performance. Personally, many of them care as much as they can for their employees, but they are always in a rush and lack of time. The reality is that the manager has to control and operate the machine - the control system. This is not only negative, as a world without control would not liberate creativity either. In fact, creativity is prompted by external constraints, i.e. it unfolds in a context of necessities. When one disposes of unlimited possibilities and resources, he/she needs not to be creative. (Milivojević, 2011:199). However, between the need to supervise and the current financial bureaucracy, there is a balance to find. The most unhappy with this situation are often the managers themselves, who don't feel that they do their job while constantly chasing new organizations, new meetings, without having time to effectively manage, that is to say, encourage, assist and support the teams, etc. (Gomez, 2014)

MacDonald provides a psychological explanation of the micromanagement phenomenon. According to him micromanagement "is a popular management tool because it appeals to both the self-doubting and self-centered manager. The weak manager is filled with insecurities and paranoia. Their worst fear is that if the job is not done right, *they* will be blamed [...] Concerned with their lack of ability, weak-willed managers also want to make sure they get the credit if the job goes well. This feeling and attitude causes the insecure manager to constantly hover over and interfere with those tasked with the actual work. On the other hand, the self-centered (should I say egotistical?) managers have this belief that they are the only ones with the knowledge and ability to actually do the job right. They don't trust others to do the job so they believe they must constantly be knee-deep in the efforts of others or the job won't get done; at least not the way they would do it. It is possible to sympathize with these managers because the truth is that if the job is not completed properly and the results are unsatisfactory, they will be deemed responsible, placing their future and even their job on the line. You can understand the feeling that if they are going to be blamed for something, they want to be in total control. But it is not possible to condone the use of micromanagement as a way to diminish this risk. In fact, micromanaging the process increases the risk of failure [...] With scant argument to the contrary, there is agreement that micromanaging is inefficient, that it suppresses creativity, suffocates alternative options, discourages the development of talent, makes for frustrated and dissatisfied employees and is often counterproductive to what the manager seeks to achieve " (MacDonald, 2013). And yet, it continues to flourish.

#### **4. PRODUCTIVISM AGAINST CREATIVITY**

The scientist Peter Higgs, who gave his name to the Higgs boson in 1964, believes that no university would hire him today because of high productivity criteria. It takes time to stimulate discoveries, he said. So, does productivity undermine creativity? Is their coexistence possible?

"Creativity takes time, requiring people to struggle down several blind alleys before finding the right solution. That's why a lot of creative activity may look suspiciously like loafing around until a breakthrough happens. [...] Managers also need to provide some flexibility for employees to alter their schedules when an interesting idea begins to develop. And they need to reward employees for engaging in tasks that ultimately lead to creative solutions, like learning new



things, developing new skills, having wide-ranging conversations with colleagues, and trying out ideas that don't work." (Rousmaniere, 2016). If the schedule is overcharged it is difficult to make room for new ideas, and there is no time to further those found. If the work schedule offers no opportunity to take breaks for reflection, creativity will be seriously compromised. The ability to generate new ideas is greater when a time off is granted to our brain to „unhook“. Breaks can lead to new ideas because they give space to direct the thoughts elsewhere. Creativity can't arise if one is not master of his/her own time. While it is true that appointments, meetings, conferences and other events can produce various stimulating experiences for creativity, giving them most of the agenda produces the opposite. (Martellini, 2014)

Various studies have shown that the "creative stress" stands only for a part of the creative process, which starts with something almost invisible, but not less important: the slow rise of intuition which itself requires the opposite of stress, relaxation, calm, „letting go“. (Csikszentmihalyi, 2006). The visible creative product is preceded by a huge invisible, unpredictable, uncertain and apparently ineffective process. Some authors emphasize that creativity requires a way of being which is incompatible with stress. (Cabana, 2009). Judee Gee affirms that „to develop our creative intuition, we must first learn to do *nothing*! This doesn't mean that we fall asleep, as creativity requires an intense, but relaxed presence. It means that we should give ourselves spaces of complete idleness [...] And as individuals are so different, everyone has to find the „tonus/letting“ dosage that matches him/her best.“ (Gee, 2010: 32). Although the creative process triggers the hormones of pleasure, mainly endorphin and oxytocin, it is still stressful because much energy is mobilized which causes general fatigue of the organism. (Filliozat, Guasch, 2006). Therefore, the alternation of periods of intense work and those of rest are necessary. The creative individuals have an uncommon work energy, but they are often calm and at rest too. They are not hyperactive, always busy and productive. In fact, they often pause and sleep a lot. (Csikszentmihalyi, 2006: 81). So, the usual organizational pressure to be perpetually and evenly creative (as well as motivated) is simply unreasonable and untenable.

The psychologists Wallach and Kogan (1965) advocated that the creativity tests, unlike the intelligence tests, should be assigned with no time restrictions. Their research showed that stereotypical, common answers are readily available while the original answers are not so quickly available due to a longer latency period. In the beginning of the testing both creative and less creative subjects provide common, usual answers. Furthermore, the rhythm of association of the less creative persons is faster than the one of the creative persons. The original responses occur later and in increasing numbers. If there is a time restriction, less creative subjects give a greater number of answers, because of the shorter response latency. When examining the correlations between intelligence and creativity, Boersma and O'Brien (1968) have also shown that creativity and intelligence diverge increasingly as two separate cognitive dimensions when the tests of creativity are assigned in an informal and relaxed atmosphere. Vernon (1971) also found that the results obtained in the creativity tests which were done in more relaxed, informal and relatively untimed, i.e. game-like conditions had a much richer psychological meaning than those obtained in usual test conditions.

As Csikszentmihalyi discovered, creative individuals work harder and persevere more than other people. Even when they don't seem to work, they actually work as they observe, gather information, muse, think and dream. They need periods of tranquility, loneliness and retreat. Their energy is under their control and not under the control of a clock, calendar or an externally imposed timetable. When it is necessary, they have the concentration of a laser, and the rest of time they gather new energy. All the creators interviewed by Csikszentmihalyi have confirmed

that this alternation between work and relaxation is crucial for the success of their enterprise. (2006). But one of the things that the employees are often suspected of from their employers and managers is that they don't work enough in terms of hours. The X or micromanagers are more focused on the quantity than on the content and quality of the work.

In short, it seems that to work creatively very much and quickly is a contradictory expectation, and that a formal and rigorous management obsessed by control and productivity is antagonistic to creativity.

## **5. THE DIFFERENCE BETWEEN CREATIVITY AND INNOVATION**

One of the indicators that the real nature of creativity is misunderstood lies in its identification with innovation. The two are closely related, but not identical, as creativity is the source of innovation. The importance of creativity in the innovation process has been significant in recent years. The literature on innovation management sheds light on the involvement of the creative process in an innovation process. (Mnisri, 2007: 8). Amabile (1988, 1997) points out that the creative process in the individual or organizational context should be treated as the first step of innovation. According to her, creativity of individuals and groups is used as raw sources for innovation. For Cook (1998) also a successful innovation product or service depends on creativity. Creativity is a process based on individual and organizational skills which play an important role in innovation. Cummings (1965) believes that the mechanisms of development of new ideas are the main supports of innovation in the whole organization. Quality and creativity remain the milestones in the process of organizational innovation, as the quality and reliability of new ideas are the source of innovation value. (Mnisri, 2007:8-9)

There is a bias harmful to understanding creativity as researchers and practitioners believe that it should be both constructive and profitable and problem-solving. Consequently, new ideas which don't solve problems are not called innovations and they are usually discarded because they are considered errors. (Kimberly, 1981). The authors usually take a functionalist approach by seeking to answer the question "how to increase creativity?" Thus the studies don't tend to analyze the creative process as such, but to discover how companies can improve their ability to be creative and innovative, i.e. by valuating teleological definitions. However, when creativity is not considered in theory and when it is reduced to the innovation process in practice, the impetus and meaning of the innovation process as a whole is lost. Only after having allowed the emergence of creative ideas, the criteria of usefulness, value creation and economic feasibility are used to select the idea which will become an innovation. This doesn't mean that the creative process should not lead to a useful production, but that if the organizations want to get more usefulness, they must devote more attention and time to the process of emergence of ideas. The selection of ideas which are evaluated as the most useful and profitable is the second phase. (Oldham, Cummings, 1996). Thus the real challenge is first to take a step back from the search of utility and economic profitability inherent in any innovation in order to enable the development of creativity. Creativity corresponds to a specific nature - different from innovation - which needs to be respected if the organizations want to improve their innovation processes. (Auger, 2003)

## **6. CONCLUSION**

On the basis of the above considerations we may conclude that „managing creativity“ is almost an oxymoron. We have seen that while the environmental factors which foster and promote creativity can be managed, it is not the case with creativity *per se*. The roots of creativity are deeply personal, reaching into the realm of the unconscious and engaging some subtle, dynamic, elusive and immeasurable variables. Creativity is always associated with the specific qualities

of each individual. The concept of group creativity doesn't refute this claim, since it relies on individual contributions, which are encouraged and enriched by mutual processes of stimulating, inspiring and motivating. In other words, the creative subject is not collective, but individual, and the group or team is one of the factors which contribute to the stimulation, improvement and selection of the best creative ideas. In her Componential Theory of Creativity, Teresa Amabile (1997) states that the creativity of individuals is the essential source of innovation, while the social environment influences creativity by influencing the individual components. As creativity is based on the individual's intrinsic motivation, his/her domain expertise and psychology, all managerial actions advised to promote the creativity of the group or organization are incentives to give more opportunities for individual expression. If they are truly committed to creativity, organizations should provide conditions favorable to individual creativity, among which more space, time and autonomy to the employees who are expected to work on creative tasks. Individual creativity can become an innovation only under specific conditions, that is, when creative expression is permitted and encouraged, and when the support to the development of creative ideas is accompanied by adequate resources and strong incentives to intrinsic motivation. This implies an organizational climate of openness and trust instead of rigid control. However, trust, flexibility and openness are fraught with risks that managers don't dare to take in today's business environment.

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## **CONTROL OF DOCUMENTS IN DOCUMENTED QUALITY MANAGEMENT SYSTEM (DQMS) AS VALUABLY COMPANY SOLUTION**

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### **ABSTRACT**

*Quality has become much more significant since the world's demand for products has grown exponentially. Along with more demand, the demand for specialist products and quality in production have grown together. Quality is something every company strives for and is often times very difficult to achieve. A cornerstone of the quality management system (QMS) is the control of documents. While not a particularly glamorous activity, document control is an essential preventive measure ensuring that only approved, current documentation is used throughout the organization. Inadvertent use of out-of-date documents can have significant negative consequences on quality, costs and customer satisfaction.*

**Keywords:** *Control, Documents, Quality*

### **1. INTRODUCTION**

Quality management started with the spot-checking of products as they rolled off the finish line. Fairly soon, however, it was realized that this was not enough to guarantee quality with every single item. As a profession, quality has grown considerably, and today it ranks as a recognized profession among the other well-defined professions such as engineering, accounting and medicine. Quality management is the single most important process in any organization, whether for profit, nonprofit or an organization such as a health-care maintenance organization. It defines the purpose of quality for the organization it represents. Quality has become much more significant since the world's demand for products has grown exponentially. Along with more demand, the demand for specialist products and quality in production have grown together. An effective QMS focuses on systematically developing and communicating a customer-focused mission, strategies and action plans; listening and responding to the customers' needs and expectations; empowering employees to continuously improve and increase their satisfaction with their work processes and environment; and gathering and analyzing key performance indicators to improve organizational and process results.

### **2. QUALITY MANAGEMENT SYSTEM (QMS)**

Quality is something every company strives for and is often times very difficult to achieve. ISO 9000 is one of the most widely recognized in the world. ISO 9000 is a quality management standard that presents guidelines intended to increase business efficiency and customer satisfaction. The goal of ISO 9000 is to embed a quality management system within an organization, increasing productivity, reducing unnecessary costs, and ensuring quality of processes and products. ISO 9000 is set up as a collection of guidelines that help a company

establish, maintain, and improve a quality management system. It is important to stress that ISO 9000 is not a rigid set of requirements, and that organizations have flexibility in how they implement their quality management system. The importance of ISO 9000 is the importance of quality. Many companies offer products and services, but it is those companies who put out the best products and services efficiently that succeed. With ISO 9000, an organization can identify the root of the problem, and therefore find a solution. By improving efficiency, profit can be maximized.

### 3. THE BENEFITS OF QMS

The main thrust of a QMS is in defining the processes, which will result in the production of quality products and services, rather than in detecting defective products or services after they have been produced. A fully documented QMS will ensure that two important requirements are met:

- A) The customers' requirements – confidence in the ability of the organisation to deliver the desired product and service consistently meeting their needs and expectations.
- B) The organisation's requirements – both internally and externally, and at an optimum cost with efficient use of the available resources – materials, human, technology and information.

These requirements can only be truly met if objective evidence is provided, in the form of information and data, to support the system activities, from the ultimate supplier to the ultimate customer. A QMS enables an organisation to achieve the goals and objectives set out in its policy and strategy.

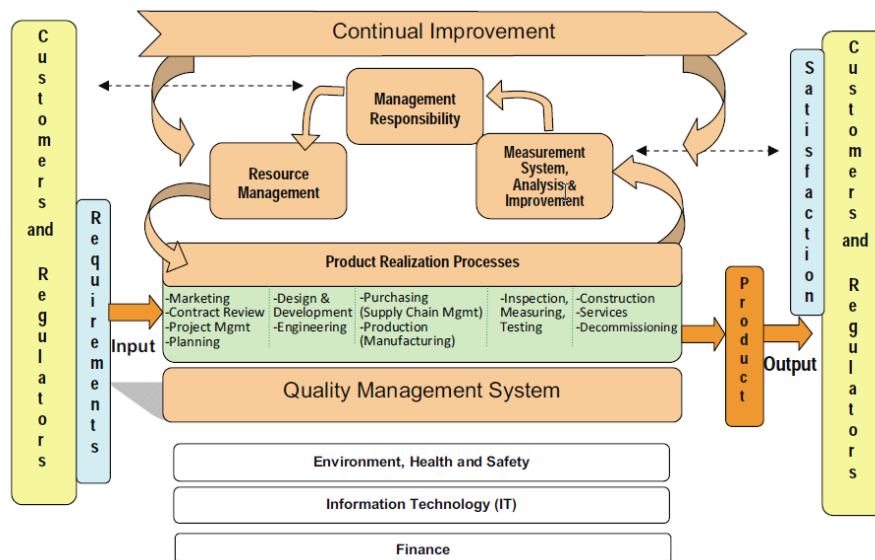


Figure 1. Quality Management System process interaction 5. (Westinghouse Non-Proprietary Class 3, Quality Management System Revision)

### 4. CONTROL OF DOCUMENTS IN DOCUMENTED QUALITY MANAGEMENT SYSTEM (QMS)

Documented Quality Management System and the customer contract requirements will be met. The procedures should be numbered so that they relate to the section of the Quality Manual that has been implemented. The Operating Procedures in particular are strictly commercial - in confidence. Quality Procedures should contain clear, detailed descriptions of those processes which are related to the application of ISO 9001. These would include such functions as quality

auditing, documentation and its control, customer-complaint handling, Quality Management System reviews, etc. A document is an information and its supporting medium. Examples are record, specification, procedure document, drawing, report, standard etc. The standard ISO 9001 requires that the organization establish and maintain documented procedures to control all documents and data that relate to the requirements of the standard. There are several types of controlled documents:

- a) policies and practices (these include control procedures, guides, operating procedures, and internal standards),
- b) documents derived from these policies and practices, such as drawings, specifications, plans, work instructions, technical procedures, and reports,
- c) external documents referenced in either of the above.

A documented procedure shall be established to define the controls needed:

- a) to approve documents for adequacy prior to issue,
- b) to review and update as necessary and re-approve documents,
- c) to ensure that changes and the current revision status of documents are identified.

The following are some of the main objectives of an organization's documentation, independent of whether or not it has implemented a formal QMS:

- A) *Communication of Information* is a tool for information transmission and communication. The type and extent of the documentation will depend on the nature of the organization's products and processes, the degree of formality of communication systems and the level of communication skills within the organization, and the organizational culture.
- B) *Evidence of conformity* is a provision of evidence that what was planned, has actually been done.
- C) *Knowledge sharing* need to disseminate and preserve the organization's experiences. A typical example would be a technical specification, which can be used as a base for design and development of a new product.

A list of commonly used terms relating to documentation is presented in Figure 2 (taken from ISO 9000:2005). It must be stressed that, according to ISO 9001:2008 clause.

Term	ISO 9000:2005 Clause	Definition
Document	3.7.2	information and its supporting medium
Procedure	3.4.5	specified way to carry out an activity or a process (Note: Procedures can be documented or not)
Quality Manual	3.7.4	document specifying the quality management system of an organization
Quality Plan	3.7.5	document specifying which procedures and associated resources shall be applied by whom and when to a specific project, product, process or contract
Record	3.7.6	document stating results achieved or providing evidence of activities performed
Specification	3.7.3	document stating requirements

Figure 2. Terms and Definitions relating to Documents (Taken from ISO 9000:2005)

Documentation may be in any form or type of medium, and the definition of “document” in ISO 9000:2005 clause 3.7.2 gives the following examples:

- a) paper,
- b) magnetic,
- c) electronic or optical computer disc,
- d) photograph,
- e) master sample.

## **5. THE IMPORTANCE OF DOCUMENT CONTROL**

A cornerstone of the quality management system (QMS) is the control of documents. While not a particularly glamorous activity, document control is an essential preventive measure ensuring that only approved, current documentation is used throughout the organization. Inadvertent use of out-of-date documents can have significant negative consequences on quality, costs and customer satisfaction. It behooves those responsible for managing their organization's QMS to design a document control process that is simple to use, easy to monitor and effective to prevent the use of incorrect documentation. Because of its importance, companies often invest heavily in dedicated staff, detailed procedures and specialized software programs to keep control of their QMS and other business documents. Auditors (internal and external) also pay particular attention to document control disciplines resulting in frequent audit nonconformances (it is commonly reported that document control generates the most nonconformances in and ISO 9001 QMS). It behooves those responsible for managing their organization's QMS to design a document control process that is simple to use, easy to monitor and effective to prevent the use of incorrect documentation. While it may seem obvious, it's easier to control a smaller number of documents than a larger number of documents. Document control starts with document design. Encourage your document authors to be concise and make their documents multi-purpose when possible. An annual documentation review to spot redundancies, documents no longer needed, and opportunities to consolidate will help keep your QMS document set lean. Developing a layered structure for your documents helps users find what they are looking for. An ISO 9001 structure typically organizes itself into 4 levels:

- A) Policy - the company's position or intention for its operation,
- B) Procedure - responsibilities and processes for how the company operates to comply with its policies,
- C) Work Instruction - step-by-step instructions for a specific job or task,
- D) Forms and Records - recorded information demonstrating compliance with documented requirements.

This logical arrangement clarifies the authority, scope and interrelationships of each document. Lower-level documents must agree with requirements of related higher-level documents. Higher-level documents generally reference lower-level documents for easy navigation. It is common for companies to add multiple references to related documents within the body of their documents. While this can help a reader quickly find additional information on a topic, the ability to maintain (update) all references to a document can be difficult. If you choose to use cross-references, be sure you have a way to comprehensively search for all instances of a specific document reference so they can be reviewed and updated if needed when a document is revised. Alternatives to intra-document referencing might include carefully designed document numbering systems, document master list showing parent-child relationships between documents. The use of an electronic document management system that helps manage document interrelationships and provides for easy searching of document contents. As a



document is written, it is often helpful to solicit input from others before it is finalized. Circulating the document for review can include future users of the document, managers responsible for the activity, workers in areas affected by the activity and other interested individuals. Planning a "review cycle" into your document development procedure can help document authors improve the quality of the resulting documentation. Document approvals are mandatory and must be kept as a record as well. When determining who should approve a particular document you must balance the desire for gaining buy-in and accountability by affected departments with the need for efficiency of the document control process. Often it is helpful to ask, "what value does each signature add to the document?" and limit approvals to those with direct knowledge or responsibility for the document. Generally, the more signatures you require, the longer the approval process will take. An alternative to a long approval list would be to include more individuals in the review process, giving everyone a chance to comment on the document before it is released. The ISO 9001 standard includes specific document control requirements that will be subject to all internal and external audits (ref. 4.2.3). Documents required by the quality management system shall be controlled. This includes all policies, procedures, work instructions, forms, specifications, and other company documents affecting quality or customer satisfaction. Records are a special type of document and shall be controlled according to the requirements given in 4.2.4. Records often (though not exclusively) result from a form that is completed and filed. A separate ISO Explained article will cover the requirements of records in detail. A documented procedure shall be established to define the controls needed document control procedure is one of six mandated procedures in the ISO 9001 standard and it must include the company's processes for the following requirements: to approve documents for adequacy prior to issue. Approval signatures must be recorded prior to the release and use of the document. Approvals may be in the form of a written signature or a password-protected electronic approval record. The date of all approvals must precede the document's release date. While not explicitly stated, this requirement also applies to temporary memos or postings that are used to communicate QMS or product-related requirements. Any temporary documents must be clearly identified, signed and dated. It is advisable to include an expiration date on temporary documents to ensure they are removed from use when intended. All documents must be reviewed periodically and updated and re-approved if needed. This review can be tied to a company's internal audit process, management review or scheduled on some periodic basis. A record of such reviews must be kept to ensure that changes and the current revision status of documents are identified. When a document is updated, a record must be kept of the change (the reasons for and nature of the change). In addition, current revision status must be maintained. This includes the current development stage (draft, review, approval, etc.) and the date or revision level (number or letter) identifying the current version of the document must to ensure that relevant versions of applicable documents are available at points of use. The storage and access of documents must easily allow individuals to find the appropriate version of a document to use where needed. Note that older versions of a document that are still needed (e.g. specifications for an older product) may remain active if necessary, but the revision level must be made clear. You should consider where designated controlled locations of your documents will be established and whether short-term reference copies of controlled documents will be permitted. Typically, the easier it is for employees to access controlled copies when needed, the fewer times they will feel the need to use an uncontrolled copy of a document. Ensuring timely and convenient access to documents is frequently the source of high costs and repeated discrepancies. The format and storage of your documents must protect a document from being rendered unreadable due to wear or damage and that every document can be clearly identified through a title, document number or other suitable identification. Documents that do not originate within your organization, but are necessary for ensuring quality and meeting customer requirements must also be controlled. These can include

customer, supplier or industry documents (including your copy of the ISO 9001 standard). However, the extent of control is limited to clear identification and controlled distribution. A log or other record would suffice to track external documents must to prevent the unintended use of obsolete documents, and to apply suitable identification to them if they are retained for any purpose. Out-of-date documents or older versions of revised documents must be protected from unintentional use. This usually requires segregation or disposal of obsolete documents. Any obsolete documents that are kept for reference or other purposes must be clearly identified through markings, separate storage areas, or other means. How can you measure the performance of your document control process? Here are some suggested metrics:

- A) *User satisfaction* – Periodically survey your employees regarding the usability of your documentation. Use the results to improve the format of your documents and training
- B) *Document errors* – Track the number of document revisions due to information mistakes in your documentation. Results will often reveal weaknesses in your review and proofreading processes,
- C) *Up-to-date* – Count the number of document revisions or audit discrepancies stemming from a document that is out-of-date. This will tell you whether your periodic document reviews or obsolete document provisions are effective,
- D) *Cycle time* – Measure the time it takes a document to be developed or revised from initial draft to release. Work to improve the efficiency of your document control process as you would any other business process,
- E) *Cost* – Consider tracking the costs associated with your documentation including developing, revising, storing, retrieving, distributing, filing, auditing, reviewing, approving, etc. Of these potential costs, document retrieval is often an expensive hidden cost generated when individuals must search endlessly for a document because of inadequate indexing, organization, storage or training.

Results of the performance measures of your document control process can help you determine how to drive continual improvements into your entire QMS.

## 6. CONCLUSION

Organizations that do not accept that quality improvement is going to be ingrained into every part of their business are not going to be around to see what the future brings. When considering a quality management system, it is of paramount importance to consider a Quality Management System (QMS) that is expressed as resources, processes, procedures and organizational structure required for quality management. Quality Management System (QMS) incorporates quality planning, provides a framework for managing the activities that enable the company to create items and services which consistently satisfy the customer, statutory, and regulatory requirements, and is a tool for achieving enhanced customer satisfaction. The QMS also provides for the continual improvement of the quality management system by monitoring processes based on their significance, measuring their effectiveness against objectives, and management selection of processes for improvement. Resources will require specific technology and a share on the networked computer system. Processes along with a new set of procedures will have to be taught and learned by participants in the scheme. And most importantly, in order to manage the system, an organization will need to be built to support it. With an ISO 9001 certified quality management system organisation/business functions are in a disciplined and systematic way, almost no matter what happens and they have fewer failures in quality of service or product. Benefits from gaining ISO 9001 includes greater management control, greater clarity about what they do and how, improvements in customer satisfaction,

having a much better handle on what they are doing, increased employee satisfaction, reduced rework and frustration, reduced maintenance effort. Management systems are needed in all areas of activity, whether large or small businesses, manufacturing, service or public sector. The quality movement and quality systems have had many different names or terms of reference in the past few decades, and might look like a short-lived business management trend at first glance. With everincreasing competition and consumer expectations, professionals and business managers cannot ignore quality issues and expect to maintain or improve their competitive position. Quality systems, time and again, have been responsible for substantial increases in the bottom line of businesses in every industry and have given organizations the boost they need to meet overall goals and objectives. Organizations that do not accept that quality improvement is going to be ingrained into every part of their business are not going to be around to see what the future brings.

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## THE EFFECT OF SMALL AND MEDIUM ENTERPRISES' EXPORT ON THE AGGREGATE EXPORT OF THE REPUBLIC OF SERBIA

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### **ABSTRACT**

*In this paper, the authors will give an estimate of the small and medium enterprises' effect on the total, that is, aggregate export of the Republic of Serbia during 2014. The analysis was conducted based on the data on the export of 400 largest exporters. At the same time, this paper represents an analysis of the Republic of Serbia's export state, as well as a comparison with countries whose economic state is held in high regard. The analysis within this paper represents a description, i.e. perceiving facts about current situation without dwelling on trends and predictions of future development. Since the area of export poses one of the main foreign trade forms it is important to carry out a relevant analysis of small and medium enterprises' impact on it. Small and medium enterprises are considered the bearers of economic expansion and the bearers of the private property idea and this is the reason from which the need for a research arises. The research should provide exact data on their share in export, the ownership structure of the exporters included in the research, their legal form, as well as on their proportion in the sense of economic activity.*

**Keywords:** *Activity, Export, Aggregate Export, Small and medium enterprises, and Republic of Serbia*

### **1. INTRODUCTORY CONSIDERATIONS**

With the emergence of globalization and the integration into economic flows, micro, small and medium enterprises were granted the opportunity to join the global market where new possibilities for doing business and accomplishing elementary business goals arose, such as an increase in sales, resources acquirement, and risk minimization. On the other hand, micro, small and medium enterprises contribute to their home country with their business operation, through taxes, a raise in state income, workforce qualification, access to modern technology, and unemployment reduction.

In this paper, the authors present an estimate of micro, small and medium enterprises' share in 400 major exporters, as well as an analysis of the Republic of Serbia's export state in this context, in addition to a comparison with countries held in high regard.

The situation in the Republic of Serbia is such that 400 major exporters support 78.23% of total income, which is why it is important to emphasize the share of micro, small and medium enterprises due to them being observed as the bearers of the idea of economic expansion and private property. Pursuant to the plan and strategy of the Republic of Serbia's Government for the aid of micro, small and medium enterprises' development, as well as that of

entrepreneurship, it is necessary to recognize the situation in our export and the proportion of micro, small and medium enterprises among the major exporters.

## 2. THEORETICAL FRAMEWORK

Pursuant to Article 6, of the Law on Accounting from 2013, which came into effect on January 1, 2014, companies are classified by size based on the average number of employees, business income, and the average business assets value as the criteria. According to their size, companies are classified as micro, small, medium and large-sized companies. Micro companies are considered to be those which have 10 employees on average, business revenue of 700,000.00 euros and the average assets value of 350,000.00 euros<sup>133</sup>. Based on the same law, small companies are those whose average employee number is not higher than 50, business revenue than 8,800,000.00 euros and the average assets value than 4,400,000.00 euros<sup>134</sup>. Medium companies are those, whose average employee number does not surpass 250, average business revenue is limited at 35,000,000.00 euros, and average asset value at 17,500,000.00 euros<sup>135</sup>.

In developed countries, micro, small and medium companies are the bearers of a major part of export, and their share amounts to even 50% in some countries<sup>136</sup>. Therefore, it is of utmost importance to emphasize their significance for state economy. Data on export of the world's leading economic forces indicate that micro, small and medium companies in China have a 68% share in the total export<sup>137</sup>, in Germany their share is around 56%<sup>138</sup>, in Japan about 54%<sup>139</sup>, in India around 40%<sup>140</sup>, and in Czech Republic circa 52%<sup>141</sup>. For the entire European Union, which comprises both developed and less developed economies, the average share of micro, small and medium-sized companies is 34%<sup>142</sup>. In case of the Republic of Serbia, there are data for 2013, i.e. for the micro, small and medium companies' share in total export, and their share amounts to 44.5%<sup>143</sup>. However, it is vital to stress the share of micro, small and medium companies within the 400 major exporters in the Republic of Serbia during 2014, so as to point out the strength which these companies possess, as well as their ability to compete with large companies.

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<sup>133</sup> Adapted from the Law on Accounting (2013), Article 6, Službeni glasnik RS no. 62/2013

<sup>134</sup> Ibid.

<sup>135</sup> Ibid.

<sup>136</sup> Kapor P. (2015), *Međunarodno poslovanje – priručnik*, Megatrend University, Belgrade, p. 4.

<sup>137</sup> Zhao Y. (2010), Research on the Approaches of the participation of China's SMEs in International Trade under Financial Crisis, *International Journal of Business and Management* vol. 5, no. 1, p.69.

<sup>138</sup> Yoshino N. et al (2015), SMEs Internationalization and Finance in Asia, *Frontier and Developing Asia: Supporting Rapid and Inclusive Growth IMF-JICA Conference Tokyo*, p. 2.

<sup>139</sup> Ibid.

<sup>140</sup> Ibid.

<sup>141</sup> Helisek M. (2013), Export Potential of SMEs and Euro Adoption in the Czech Republic, *European Research Studies*, Volume XVI, Special Issue on SMEs, p.75.

<sup>142</sup> Cernat L. et al (2014), SMEs are more important than you think! Challenges and opportunities for EU exporting SMEs. No. 2014-3. Directorate General for Trade, European Commission, p.4.

<sup>143</sup> Vesković N. (2015) Opstanak malih i srednjih preduzeća u uslovima otežanog privređivanja, *Synthesis 2015 International Scientific Conference of IT and Business-Related Research*, p. 634.

It is also important for analysis to define the ownership structure of companies included in the research. Categories which are distinguished are domestic companies, followed by predominantly domestic, mixed, predominantly foreign and foreign-owned companies. Domestic companies are those which are 100% under domestic ownership, whilst predominantly domestic are those whose share of domestic ownership is more than 50%. Mixed ownership companies are those within which the ownership structure is equally divided between domestic and foreign owners. Predominantly foreign companies are those whose controlling interest is in the hands of foreign legal entities and individuals, and foreign companies are those which are 100% under foreign ownership.

### 3. RESEARCH

This research was conducted based on the analysis of 400 enterprises which are at the same time, the largest exporters. The data by which they were grouped are: size, the volume of export in euros, activity, ownership structure, as well as the region in which they are located. Basic statement founded on the research at which the authors arrived in this paper is that micro, small and medium enterprises can be major exporters similar to large exporters. The aim of this research is the representation of the micro, small and medium enterprises' proportion and their share in the total export of major exporters; variety of activity, and also a representation of regional distribution. The results were obtained by the statistical method through several stages, such as: sample forming; data gathering from *Serbian Business Registers Agency*, *Statistical Office of the Republic of Serbia*, and domestic and foreign publications; statistical analysis; and a representation of obtained results. The research was carried out on the basis of the data for year 2014, since the data for year 2015 haven't been officially published till the writing of this paper.

In 2014, the total export of the Republic of Serbia was valued at 11,158,500,000.00 euros. Table 1 shows that companies included in this research, that is 400 of them, account for approximately 78.23% of total export, i.e. 8,723,151,122.00 euros. Micro small, and medium companies constitute 64.5%, that is 258 companies, with a share of 21.8% in total revenue which amounts to 2,432,996,131.00 in euros.

Table 1. Total export and micro small, and medium, companies' share in 2014

	Total	Share (%)
Companies included in the research	400	100%
Micro small and medium companies	258	64.5%
Total export of RS	€ 11,158,500,000.00	100%
Total export of 400 companies included in the research	€ 8,729,151,122.00	78.23%
Total export of micro, small, and medium enterprises included in the research	€ 2,432,996,131.00	21.8%

Source: Authors, based on the data acquired from the Statistical Office of the Republic of Serbia and Serbian Business Registers Agency

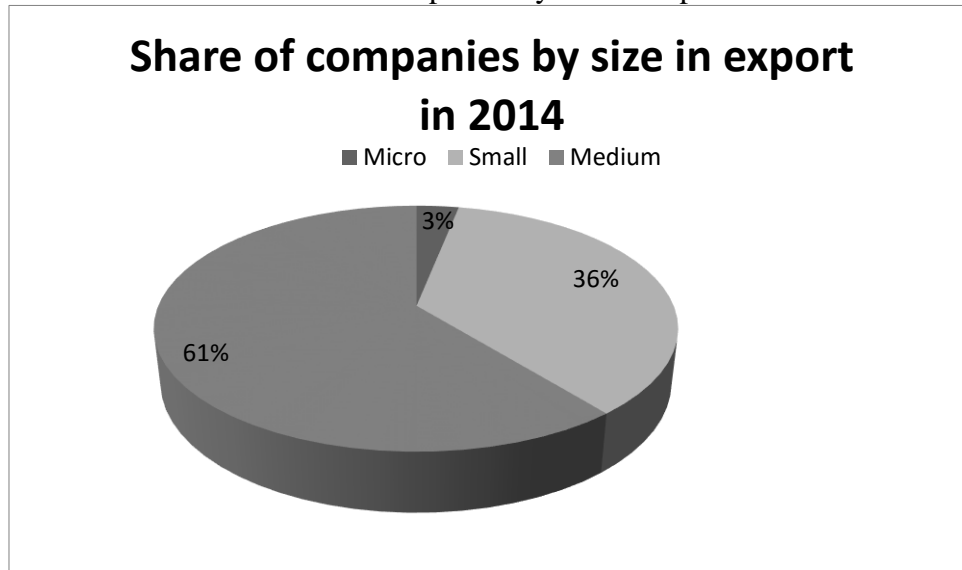
Table 2 indicates that among 258 micro, small, and medium companies included in the research, micro companies make up 3.1%, that is 8 of them, 5 being under domestic, and 3 being under foreign ownership. There are 93 small companies, i.e. 36.05%, and 157 medium companies, which represent 60.85%. Small and medium companies in question are mostly under domestic ownership. Chart 1 sums up the data from Table 2.

Table 2. Share of companies by size in export which were included in research in 2014

Size	Number of companies	%	Amount in euros
Micro	8	3.10	44,022,986.00
Small	93	36.05	671,851,608.00
Medium	157	60.85	1,717,121,537.00
Total	258	100	2,432,996,131.00

Source: Authors, based on the data acquired from the Statistical Office of the Republic of Serbia and Serbian Business Registers Agency

Chart 1. Share of companies by size in export in 2014



Source: Authors, based on the data acquired from the Statistical Office of the Republic of Serbia and Serbian Business Registers Agency

From the ownership structure aspect, companies are classified as domestic, predominantly domestic, mixed, predominantly foreign and foreign-owned companies. Companies which are under domestic ownership make up 53.88% (139 companies), predominantly domestic 1.94% (5 companies), mixed 1.16% (3 companies), predominantly foreign 6.20% (16 companies), and foreign-owned companies 36.82% (95 companies) of observed companies' total number (shown in Table 3).

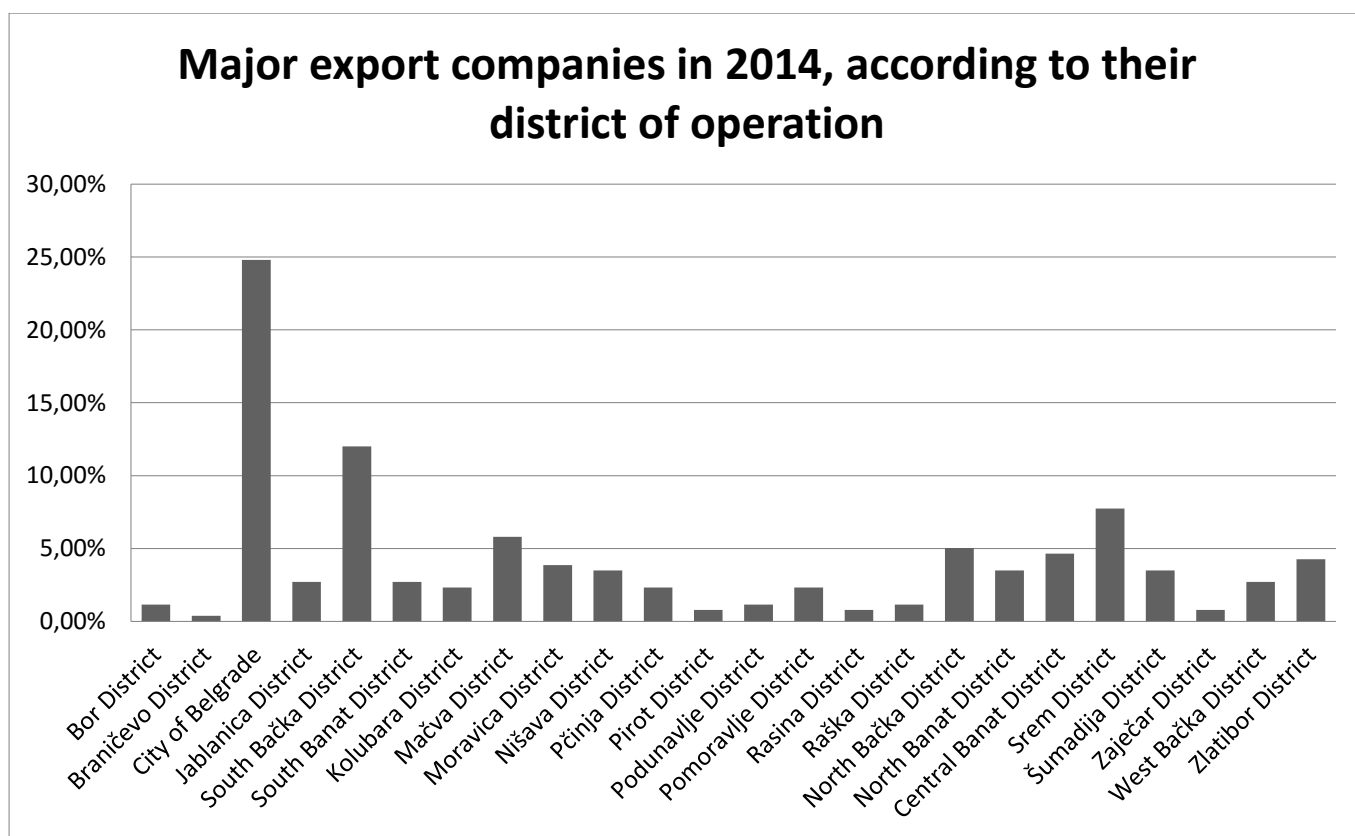
Table 3. Companies included in the research according to their ownership structure in 2014

Ownership	Number of companies	%	Amount in euros
Domestic	139	53.88	1,135,241,379.00
Predominantly domestic	5	1.94	33,876,798.00
Mixed	3	1.16	19,085,664.00
Predominantly foreign	16	6.20	144,389,417.00
Foreign	95	36.82	1,100,402,873.00
Total	258	100	2,432,996,131.00

Source: Authors, based on the data acquired from the Statistical Office of the Republic of Serbia and Serbian Business Registers Agency

On the subject of the district in which the observed companies operate, the major number of them are located on the territory of Belgrade (64 companies), among which medium-sized companies prevail. According to the number of the largest export companies in the Republic of Serbia, the second district is South Bačka as the place of operation for 31 of the total number of companies. These are followed by: Srem District (20 companies), Mačva (15 companies), North Bačka (13 companies), Central Banat (12 companies), Zlatibor (11 companies), Moravica (10 companies), Nišava (9 companies), North Banat (9 companies), Šumadija (9 companies), Jablanica (7 companies), South Banat (7 companies), West Bačka (7 companies), Kolubara (6 companies), Pčinja (6 companies), Pomoravlje (6 companies), Bor (3 companies), Podunavlje (3 companies), Raška (3 companies), Pirot (2 companies), Rasina (2 companies), Zaječar (2 companies) and Braničevo (1 company) – all represented on Chart 2.

Chart 2. Major export companies in 2014, according to their district of operation



Source: Authors, based on the data acquired from the Statistical Office of the Republic of Serbia and Serbian Business Registers Agency

Most of the companies included in the research, and which represent major exporters in 2014, engage in wholesale trade of various items such as grain, raw tobacco, seeds and food for animals, wholesale of animals, raw and unprocessed and processed leather, fruit and vegetables, meat and meat products, clothing and footwear, electrical appliances, metal or metal ore, building materials and wood, chemical products, or non-specialized wholesale trade. Companies which take part in wholesale trade are mostly under domestic ownership, and those are mainly companies which, according to their size, fall into the category of small companies. Moreover, there are many companies which practice processing and bottling of fruit and vegetables, as well as those which engage in re-using the secondary raw materials. These companies are chiefly under domestic ownership, but predominant ones are those which are considered medium in size.



#### 4. CONCLUSION

According to the conducted research, in the paper the authors reached the following conclusions: the major part of the Republic of Serbia's export is carried by a relatively small number of enterprises, more precisely, 78.23% of the total export is made up of only 400 enterprises which represents 0.43% of the enterprises from the overall number of the registered ones. The proportion of micro, small and medium enterprises is exhibited in the total export, but however, it is significant to highlight that they are among the 400 largest exporters. Their share in the export of 400 largest is not substantial, that is, it represents 21.80% which indicates that more of their presence is needed, but also that they can stand shoulder to shoulder with large enterprises. In other parts of the world, micro, small and medium enterprises play a major role in the economic development of countries, and as mentioned, they are of immense significance for the international exchange and are the bearers of innovation and technological advancement, and this is exactly the role they ought to have in the Republic of Serbia, a not the one of standing in the shadow of large enterprises.

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## SMALL AND MEDIUM-SIZED ENTERPRISES AS AN INFLUENTIAL FACTOR TOWARDS THE ECONOMIC GROWTH OF COUNTRIES WITH TRANSITION ECONOMIES

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### **ABSTRACT**

*This paper argues the potential of small and medium sized enterprises to stimulate sustainable economic growth for transition countries. Firstly, the article discusses that SMEs are more successful tool to accelerate job creation process and to distribute economic resources efficiently. SMEs' flexibility is also mentioned as a key characteristic that allows them to adapt quickly to the changes in market and institutional conditions. Then, we stress on the SMEs capability to deepen the technological diffusion, which can be crucial for developing countries' economic prosperity. It is also shown that, competitive markets, as an essential determinant of sustainable economy, can be achieved only by the high presence of SMEs. And this competition can bring the innovative production and management strategies and cost-efficiency to the economies of developing countries. Finally, the paper introduces the necessary policy steps that governments of developing countries must follow to enhance the competitiveness and efficiency of the SMEs and to create a satisfactory business environment for them.*

**Keywords:** *competitive markets, economic growth, industrial innovation, SMEs, transition economies, technological diffusion*

### **1.INTRODUCTION**

Nowadays, the ongoing process of globalization enforces the interdependence of countries and their economies. Countries with transition economies should create new partnerships and should enter to the world market with new competitive products. In this sense, they need to develop effective business atmosphere and stimulate SMEs sector, including new start-ups.

SMEs play an important role in developing countries with transition economies. The overall share of SMEs is counted as more than 90% of all firms, excluding agricultural sector firms. These types of firms are the main source of new jobs, possible solutions tools of internal demand and export problem.

The first chapter shows how SMEs can accelerate job creation and how they promote gross domestic product (GDP). Especially, in transition economies with high unemployment rates it is very influential to strengthen SMEs sector to solve the unemployment problem. It is mentioned here that, in OECD countries more than 60% of jobs are created by SMEs. In some cases, this share is about 70% and more. Job creation is much more notable in service sectors. Real country cases have also been shown in this section as an example of countries with successful SMEs strategy and results. By this, the paper aims to indicate how the successful SMEs sector can be beneficial for transition countries to tackle high rates of unemployment.

The second chapter of this paper introduces the role of SMEs in technological diffusion and technological competition. Technological competition and innovation are the essential determinants of sustainable economic development. It is clear that innovation accelerates enduring economic competition processes in countries' economies and makes countries be a successful regional or a global actor in the competition. To achieve profitable innovation activities, countries need effective innovation enhancement strategies and progressive SMEs sector. This section introduces possible innovation policies in transition economies and their roles.

The third chapter shows the possible solution ways and methods to develop SMEs sector in the countries with transition economies. First and second chapters reflects the substantial role of SMEs in job creation, technological diffusion, competition and the role of SMEs as an accelerator of economic development. But this third section shows which particular types of policies should be implemented by government of transition countries to stimulate SMEs sector. It is discussed that countries should create an effective business atmosphere and enhance the quality of financial institutions, establish new programs, which can sustain progressive SMEs sector.

## **2.SMEs IMPACT ON EMPLOYMENT AND VALUE ADDED**

SMEs can foster the economic situation through various channels. They are important job creators, contributors to gross domestic product and effective players to narrow income gap. This section shows how above mentioned characteristics of SMEs can accelerate economic development of transition countries.

It has been argued for a long time period that SMEs do actually create more jobs than the big businesses. David Birch's book (1987) may be indicated one of the first sources of this claim. Birch's mentioned empirical work reflected that small and medium sized firms actually create more job opportunities compared with large ones. And gradually this debate has become the focus of works both in academic sphere and in media, because of its potential impressive impact on policymaking. But Birch's work was criticized by Davis (1996) claiming methodological imperfections and problems related to the data. But Neumark et al. (2008) reconsidered the issue for the case of USA economy by using a better empirical method and dataset and got a result similar to Birch's work. The work indicated that small firms and businesses create more jobs than big ones. And strong negative relation of firm size and job creating process in manufacturing sector was also one of the interesting findings of the work.

SMEs play an active role in almost all OECD economies by accounting for 60 to 70 per cent of employment. The share of SMEs in employment is a bit lower in manufacturing sector compared to service sector varying from 40 to 80 per cent. As wholesale and retail trade, hotels, restaurants are dominated by SMEs, its share of employment in service sector is much higher. SMEs' share of employment in construction sector normally varies from 80 to 90 per cent in these countries.

SMEs outstanding capacity as a job originator is especially important for developing and transition countries that are experiencing high unemployment rates. Over 60 per cent of employment in Croatia belongs to SMEs' activity. In Estonia SMEs account more than 70 per cent of total jobs and 80 per cent of manufacturing jobs. In Ecuador, private companies with fewer than 50 employees account for 55% of employment.

But it is also worthy to mention that SMEs are also involved in the job destruction process like business entities of all sizes. One research in this field shows that business entities employing fewer than 20 workers account from 45 to 65 per cent of new job gains and from 36 to 56 per cent of yearly job losses. That the total job creation power of small and medium sized enterprises strongly offsets amount of jobs that they cost.

Transition countries that struggle with a high record of unemployment can rely on SMEs sector to achieve better economic performance. Wide range of SMEs competing with each other in the economy will allow the country to enjoy wide range of investment activities and job opportunities.

Well functioning SMEs sector can also be an influential gross domestic product contributor for a country. According to the ACCA statistics SMEs cover more than 50 per cent of private sector value added in the countries that reliable information is accessible. It is not surprising that SMEs' share in the overall economy varies in developing countries compared to developed countries. They own 51 per cent of GDP in high-income countries, whereas it is just 16 per cent for low-income countries. SMEs accounted for 60 per cent of Australia's value added in 2010. They contribute 55 per cent of GDP in OECD countries and around 57 per cent in South Africa. But in most of the transition economies it is below 40 per cent. Even for countries as Russia, Kazakhstan, Azerbaijan this figure is below 20 per cent. On the one hand, the broad existence of illegal economy in low-income countries may be partly responsible for this difference. On the other hand, problems related to SMEs sector in developing countries, as low competitiveness, unfair competition conditions they are facing, unavailability of financial and other resources can explain these diverse results. Underperformed SMEs sector is one of the main reasons of the economic hurdles those countries face.

Designing more efficient and suitable environment for SMEs to help them improve their competitiveness may have a positive impact on both employment and GDP in transition countries. Well functioning SMEs sector means more investment projects, which in turn will increase production and depress unemployment.

Another important feature of small and medium sized enterprises is that they can play an influential role for tackling income inequality. According to OECD analysis (2014), reducing income inequality can boost economic growth. The works indicates that countries with decreasing income inequality grow faster compared to countries with rising inequality. Thus to achieve sustainable economic development SMEs' role on reducing income inequality should also be taken into consideration.

### **3. THE ROLE OF SMEs IN TECHNOLOGICAL DIFFUSION AND TECHNOLOGICAL INNOVATION THROUGH COMPETITION IN TRANSITION ECONOMIES**

This chapter shows how SMEs are successful in strengthening technological diffusion and technological competition in the countries with transition economies. This is very important for developing countries' economic progress and social prosperity. The innovation policies of SMEs and the role of SMEs on contributing to the development of technological environment of countries have also been analyzed in this part of the paper. Competitive markets are the main determinant of sustainable development and high share of SMEs in the countries with transition economy enforces the competitiveness, allows new management strategies and brings cost-efficiency to the economy.

#### **3.1 SMEs and technological diffusion in transition economies**

The role of SMEs on technological diffusion is significant. SMEs are effective users of new techniques and technological advances. It is clear that governments view innovation dispersion as a vital course to expanded intensity, particularly, dissemination into small and medium-sized enterprises (La Rovere, 1998). SMEs in developing countries have substantial difficulties associated with the absence of technological resources. SMEs are very successful players to receive new technological changes and use them for industrial purposes. As it is known, technological diffusion is noteworthy for countries' economies for being the part of global technological competition. For this purpose, most of the developed countries increase R&D

expenditures and try to motivate SMEs to innovate. As the main part of economic growth, transition countries should increase the share of SMEs in the economy and also create them suitable conditions to get access to necessary resources that enable them to adapt technological advances. Increasing the share of SMEs in the economy may stimulate technological development in their economy. Through this way, it also helps them to decrease unemployment and to increase social prosperity.

Technological diffusion is a distributional process of innovative techniques. SMEs are relevant actors for enhanced technological diffusion in a country. They can easily adapt to the high speed of new changes and innovations. New innovation techniques can easily be transferred among SMEs (Stoneman and Karshness, 1993). It is called as “internal diffusion”. Technological diffusion among SMEs may occur by the transformation of technological expertise and knowledge. Also it can be through transferring new technologies and production processes. If all SMEs can absorb the new technologies, then diffusion of technology in the economy can be extended massively.

To increase the share of SMEs will help transition economies to evolve technological environment in the country, then to develop relationships among firms. SMEs are always interested in relationships with purposes of exchanging technological knowledge and practices. Cooperating with other firms may allow SMEs to gain industrial successes. Thus, increasing the share of SMEs in the country will enhance the rate of innovativeness in domestic markets and it tends to have positive impact on the development of national economies. The next subchapter is about the innovation policies of SMEs and their role in technological competition.

### **3.2 Innovation policies of SMEs and their role in technological competition**

It is clear that nowadays innovation is very crucial for firms to compete effectively in the market, especially for small and medium sized enterprises. But there are some differences between SMEs sector and large firms regarding the innovation policies and performances. Various studies have examined the relationship between size of firms and innovation capacity. Most of the studies claim that small and medium sized firms easily adapt to the new innovation environment and strongly try to make use of the innovations to develop.

As small and medium sized enterprises (SMEs) mainly have limited resources compared to big businesses. And this forces them to follow consistent innovation strategies to stay in the market. SMEs can adopt changing conditions more easily than big businesses because of their dynamic and innovative characteristics. SMEs tend to introduce their new innovative products and services to the new customers easily and very speedily. Through applying innovations SMEs aim to be more competitive in the market. This is a very defining factor for SMEs in their competition with large firms.

The productivity of firms also plays an important role in their competition policy. The productivity performance of firms depends on their own R&D efforts. It directly influences the productivity of firms. The pool of knowledge, which developed by other firms, also can give an impulse to own R&D expenditures of firms. R&D expenditures from other firms can be thought to influence mutual productivity, as a source of technological spillovers. It is not possible to disregard that firms evolve in a competitive environment and their R&D decisions are not taken independently from R&D choices of competitors. Consequently, R&D efforts are sources for competition too. SMEs contribute to the competitiveness and management processes in the country by applying R&D policies and innovations. The strategies of SMEs to evaluate the consequences of their own knowledge absorption may also contribute to the competitiveness in the markets. Though, they enter and act in the market as a company with small market share, they have a capacity to influence the directions R&D policies and innovations.

## **4. HOW TO STRENGTHEN SMEs SECTOR IN TRANSITION COUNTRIES?**

### **4.1 Improving the administrative and legal environment**

Successful economic policy is so important to ensure the efficiency of the private sector. Transparent, without bureaucratic and administrative barriers, efficient economic system are the basic principles for the free market economy. It is known that, economies of the developing and transition countries suffer from the strict and costly administrative barriers which may have negative impact on entrepreneurial activities. Inefficient economic regulation in these countries prevents entrepreneurs to run their businesses successfully. Lack of the coordination among government bodies dealing with economic policy, illegal control and inspections of tax inspectors cause a corrupted business environment. It is a crucial step to eliminate illegal administrative barriers and inspections in order to form efficient economic environment, to help small entrepreneurs to develop and make their businesses more competitive. In addition, to reform and develop the judicial system is also the determinant towards successful economic environment. Fair and independent judicial system will let entrepreneurs rely on contract and property rights, be responsible about their liabilities.

One of the effective methods to improve economic and administrative situation for the enterprises is to organize a dialogue between government and private sector. Effective and stable negotiations between government and private sector can have positive impact on the formulation of effective and sustainable support program for enterprises. Economic policy-makers can form efficient regulation mechanism and business laws by improving the dialogue environment between government and private sector with the help of the following methods: firstly, independent and transparent institutional associations should be organized to represent private sector in this discussions and dialogue process. Trainings and seminars should be held to increase business and managerial knowledge of the entrepreneurs. Entrepreneurs cannot explain and address their business hurdles to the policy-makers without having ability to analyze microeconomic and business environment even there is a dialogue opportunity. This method has been experienced in some Eastern Asian countries. In addition, these trainings may encourage small entrepreneurs, agricultural entrepreneurs to address their suggestions and claims to the government. And also it is important that governments should be interested in organizing this process transparent and fair, and also should aim to investigate entrepreneurs' suggestions frankly.

### **4.2 Possible ways to solve financial insufficiency problem**

It is obvious that financial capacity is one of the main determinants of SMEs' development. And the one of the main problems of SMEs in transition countries is an access to the sufficient financial resources. Commercial banks and investors are often reluctant to work with SMEs for various reasons:

1. Small and medium sized enterprises are considered as risky clients because of their insufficient assets, sensitivity to market fluctuations and low capitalization rates.
2. Information asymmetry arising from SMEs' lack of accounting records, inadequate financial statements or business plans makes it difficult for creditors and investors to assess the creditworthiness of potential SME proposals.

As lending small amounts creates additional administrative costs to the banks and other credit firms, it may not be profitable for them to be involved regarding their business interests. Thus, commercial banks generally prefer to cooperate with corporate borrowers that provide better business plans, more reliable financial information, better chances of success and higher

profitability for the banks and possess higher credit ratings. When banks lend to SMEs they add risk premium and assumed costs of controlling to the initial interest rates, which drives up costs for both sides. Commercial banks in developing countries and countries with transition economies often prefer to lend to government and thus the public sector crowds out the private sector. Lastly, there is also the problem of insider lending and cronyism that diverts finance away from SMEs. Recently in OECD and some Asian countries lending to SMEs has been made more attractive by driving down the transaction costs and risks. And one of the ways to lower cost of the lending to SMEs is to form a guarantee program. Forming a guarantee program requires utmost care. Most of the programs had been unsuccessful except few sustainable ones. Some cases of the late payment by the guarantors in the default situations made banks reluctant to involve such programs. But successful guarantee mechanisms can play an important role in creating access to the additional financial resources of SMEs in Japan. Theoretically, it is accepted as one of the influential steps to enhance competitiveness of SMEs.

One of the alternatives of the traditional bank loan is the leasing services which gained significant successes in the developed countries. The main advantage of the leasing services comparing with traditional bank loans is no need for prior collateral.. There are also some other advantages of leasing services, such as financing can reach up to complete equipment value. Improving leasing services up to a level that meets enterprises' demands will affect positively on their competitiveness. Venture capital services may also be considered as an alternative variant to the traditional bank loans for the start-ups and high-growth potential enterprises. Venture capitalists are generally willing to accept high levels of risks do not require collateral nor charge interest payments and it is by nature long-term or at least medium-term capital, in contrast to short-term loans from banks. It requires a constant flow of high growth potential projects, well functioning financial markets that provide exit opportunities to investors, entrepreneurs that are willing to sell significant equity to outsiders and also willing to be either acquired or participate in a public offering. Only a few countries, such as Israel, Taiwan POC, and the United States can claim any success in establishing a viable market for venture capital but they also have suffered severe setbacks in the past couple of years. Central Bank and other economic policy-makers should try to encourage commercial banks to cooperate with small and medium sized enterprises. And government also has to design a policy framework to ensure SMEs access to the financial sources. According to this policy framework, Central Bank may require disclosure of the bank credit portfolios by different categories of debtors, lower the risks that banks encounter with the help of guarantee programs.

#### **4.3 Business development services**

Current principles of international competition require specialized enterprises that are able to adopt variable economic situations. According to the modern economic formation competitiveness that bases on the quality is more preferable than price-based one in the international market. But small and medium sized enterprises are not able to adopt high managerial principles, technological innovations in order to produce new and high quality goods on their own. It is worthwhile to note that it is impossible for this rank enterprises to adopt high technological innovations, to find new financial sources, to improve technical skills of employees without support programmes. In this sense, in recent decades business development services has gained main importance in the policies of the governments and international institutions in number of countries. These business development services help private enterprises to make use of technological advances, to get information and financial access for enhancing competitiveness. Business development services organize training programs for enterprises to teach how to use modern managerial and marketing methods, follow technological advances, supply alternative type of goods. Considering the problems of using

modern marketing and managerial methods, adopting internationally accepted financial and accounting principles, supplying new and differentiated goods and services in SMEs' activities, existence of the business development services may influence positively in the local and global competitiveness of these enterprises. There are some factors that should be taken into account while carrying out this process. Business development services must be formed as a private sector component, government has to be responsible only for ensuring adequate legal and economic environment. In addition, government may also interfere to solve the inefficiency and non-transparency problems in this sector. Business development services to the private enterprises must be organized by the partner commercial unities, business associations, and also by the individual consultants. Bearing in mind the time pressures on SMEs, BDS must be brought as physically close and made as convenient as possible for the small-scale entrepreneur. This requires the maximum feasible vertical and territorial decentralization in organizing BDS.

#### **4.4 Inter-firm cooperation**

Inter-firm cooperation can also help SMEs to overcome some traditional difficulties. Various types of cooperation as horizontal or vertical, spontaneous or artificial, formal or informal, may have positive impact on the competitiveness of SMEs through creating synergy and effectiveness. Inter-firm cooperation is able to create a chance for the entrepreneurs to adopt technological-innovative advances and to increase their business skills. A number of Eastern Asia countries experienced inter-firm cooperation method successfully. Global production chains in automotive, electronics, electrical appliances, machine tools, chemical sectors, include TNCs and their affiliates, domestic conglomerates and other large firms (public or private), and SMEs. Korean and Taiwanese SMEs account for more than half of the exports and most of them are independent global exporters. This indicates that inter-firm cooperation occurs not only within countries, it is also experienced globally across borders by the leading companies of North America, Western Europe and Japan. Inter-firm cooperation may be organized in different forms; strategic alliances, networking and partnering, franchising, etc. It can be promoted by physical nearness in clusters, industrial parks, technological incubators, and exports processing zones (EPZs).

#### **5. CONCLUSION**

This paper indicates a potential utmost role of SMEs in ensuring sustainable economic growth in transition economy countries. It is shown that SMEs can be an influential factor to lower the unemployment rate of these countries. Alongside this, progressive SMEs sector may have important contribution on GDP level of transition countries. It is also stated that by diminishing the income gap in countries SMEs can also enhance domestic demand and education level, which in turn may contribute positively on economic development. Fair competition among business entities is one of the most essential factors of countries' sustainable economic development. This paper discussed that broad and efficient SMEs sector can be the reflection and stronghold of enduring competition in local markets, which also may bring regional and global competitiveness to transition economies. They have an ability to foster the technological diffusion process and introduce innovativeness to national economies. Above stated arguments clearly shows how SMEs can accelerate economic growth in transition countries. In this sense, the article also includes some important policy options to expand and motivate SMEs sector in transition countries. Creating efficient legal and business environment, constructing financial system and institutions that allow SMEs to get necessary financial resources are the key steps. Governments of transition countries should also take into consideration of business development services' and inter-firm cooperation's impact on SMEs' successes.



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## ACCOUNTING ADJUSTMENTS FOR APPRAISING SMEs IN GREECE

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### ABSTRACT

*The present paper examines accounting issues that come up when evaluating a private firm under the Greek accounting standards. More specifically, we try to provide an accounting framework for appraisers who, when they try to retrieve intrinsic values of SMEs, make use of the Free Cash Flows to the Firm (FCFF) model. We focus on adjusting the firms' statements' items in order to produce a nominator that is consistent with the FCFF theory, taking in response- among others - the differences between IFRS (which are mainly used in several countries for business valuation) and the Greek General Chart of Accounts. Finally, we produce a rather normative formula, which can be positively used upon this very model (FCFF) in order to assess the value of a private firm in Greece.*

**Keywords:** valuation, private firm, FCFF

### 1. INTRODUCTION

Valuation of a firm via discounted free cash flows to the firm is a common way to evaluate a non-public enterprise, because of the flexibility that offers. Free cash flows to the firm are cash flows available to the potential investor (especially in cases of mergers, acquisitions, audit etc) after deduction -from net income- of investments in fix and working capital and after addition of net non-cash charges and after-tax interest charges. This simple theorem gets more complicated when different accounting systems provide different information about the same items. What motivated us to research accounting and taxation issues applied on the valuation model of FCFF is the lack of research on the field for Greek firms. While there have been several research on valuating public companies, there has been an inadequate number of papers and articles when it comes to private firms. As the main reason for this fact we consider to be the differences between the Greek accounting and taxation scheme, which make the compliance with the main theory hard. The methodology we use to accomplish our goal is rather normative, since we try to adjust certain accounting items so that they converge to the discounted FCFF theory. Our effort for contribution in research lies upon the adjustments we make in order to comply with the discounted FCFF model. We try to produce a pro forma model useful for any further research on appraising Greek private firms that uses the discounted FCFF model.

### 2. THE DISCOUNTED FCFF MODEL AND ACCOUNTING ISSUES

In order to use the discounted FCFF model, two components are needed to be calculated: the free cash flow to the firm and a discount rate – the WACC. The free cash flow formula (the nominator) is described below:

$$FCFF = NetInc + NetNonCashCharges + Int(1-t) - InvFixCapital - InvWorkingCapital \quad (2.1)$$

Net Income can be easily retrieved from the firm's Income Statement, assuming that all revenues and expenses are fully depicted in the Statement. Net non-cash charges are items in

the Statement that may decrease earnings, but do not require an outlay of cash. The most common case of such impairment is depreciation expenses of fixed capital. Due to the fact that such charges are not operational outflows, they are added back to net income to depict the real cash flow picture to the investor. Following a same reasoning, after-tax interest is also added back to net income. The Investment in Fixed Capital that is deducted from the net income is actually the percentage increase in fixed capital from one financial year to the next that required funding and, of course, is not included as an expense in the Income Statement, rather as an Asset in the Balance Sheet. As such items conceal cash or cash equivalent charges they should be included in the calculation of FCFF. Investments in Working capital (increases in inventory, accounts receivables etc or decreases in accounts payable, short-term debt etc) also conceal cash or cash equivalent charges and should, therefore, be included as a decreasing item during calculation of FCFF, as well.

In order to get the present value of FCFF, it is necessary to discount them. WACC is used as a discount rate, because it expresses the opportunity cost that the capital providers of the enterprise have to pay. Assuming a firm is financed by the two main sources of finance, equity and debt, WACC can be calculated by the following formula:

$$WACC = \frac{Debt}{Debt+Equity} r_d (1 - T) + \frac{Equity}{Debt+Equity} r \quad (2.2)$$

$r_d$  refers to the cost of debt and can be calculated taking in account the current rate of the bonds of the firm or other forms of debt that the firm may be financed by, such as bank loan rates etc.  $r_d$  has to be adjusted to reflect the real cost of debt, because the interest that a firm pays is tax deductible and, as a result, the firm is benefited by financing itself by debt. The adjustment is to take in account the after-tax cost of debt.

$r$  refers to the cost of equity. Cost of equity is the required rate of return by the investors and can be derived from models like the CAPM, the APT etc.

Finally, the percentage between debt and equity reflects the capital structure of the firm. Since it is not always stable through time, the perfect capital structure can be used in order to calculate WACC (Farber et. al., 2006).

Going further, in order to calculate the present value of the firm the following formula is used (Tham & Véléz-Pareja, 2004):

$$V_0 = \sum_{t=1}^{\infty} FCFF_t / (1 + WACC)^t \quad (2.3)$$

Following the reasoning of the Gordon growth model of dividend discounting, assuming a constant rate of growth ( $g$ ) is assumed, and the above equation transforms as:

$$\begin{aligned} FCFF_t &= FCFF_{t-1}(1 + g) \\ V_0 &= [FCFF_0(1 + g)] / (WACC - g), \end{aligned} \quad (2.4)$$

where

$$FCFF_t = FCFF_{t-1}(1 + g) \quad (2.5).$$

The main model comes as presented above. However, when it comes to private firms, there are a few special issues that need to be taken into account. In this section our analysis is based on the surveys of Feldman (2005), Bajaj et. al. (2001) and Damodaran (2005) on appraising private companies. The four key elements utilized for valuation of private companies are: the cost of capital, cash flows discounted, adjustments on value due to the lack of market information (discount for lack of marketability) and adjustment on value (control premium), because of admission of the investor in the company management (depending on the legal framework of the country).

As private firm shares are not traded on a stock exchange, the cost of equity cannot be easily derived. Instead there has to be an indirect method of calculation. This method suggests the initial calculation of the average beta of public companies in the same industry, which are comparable to the private company. The assumptions that are made about which companies are comparable enough are plenty, because the analyst has to take into account all activities of the company and use even public companies in adjacent industries, using a broad interpretation of the concept of economic sector. Having calculated the average coefficient beta, then calculated the average tax rate and the average debt-to-equity ratio of foreign - capita. This is how the average unlevered beta is calculated:

$$\beta_{unlev} = \beta / [1 + (1 - T) \left( \frac{D}{E} \right)] \quad (2.6)$$

After that, the beta of the private firm can be easily derived:

$$\beta_{priv} = \beta_{unlev} [1 + (1 - T_{priv}) \left( \frac{D}{E} \right)] \quad (2.7)$$

At this point, it is assumed that the debt-to-equity ratio of the company will converge in the short term with the corresponding average ratio of the industry. Alternatively, the ratio can be calculated as the objective of the management, as estimated by the analyst, of course. In each case the beta of the firm is calculated according to the average beta of companies in the sector or adjacent industries. If historical data of the firm are many, then the returns (calculated using fundamentals) are to be regressed with market returns of the industry or with the returns using a composite index. From the resulting regression a coefficient occurs, which is the beta of the private company. In both cases - and comparable accounting beta – the risk exists that the estimation is biased to some extent, as in the first case the assumptions may simply be not applicable, while in the second case bias may stem from the poor quality of accounting data.

Eventually, cost of capital can be calculated. Should, however, the assumptions made in each case to be consistent with each other, for example if the assumption followed that the cost of capital converges to and thus coincides with the industry average (listed companies), the same assumption should be made as far as the cost of debt is concerned.

The second key element in evaluating a private firm is discounted cash flows. Cash flows in this case show specific features that hinder their accurate depiction in a valuation analysis. These characteristics may be: different accounting standards and norms from country to country (therefore, requires a good knowledge of accounting framework and legislation by the analyst), mixture of personal with business expenses in the accounts in many cases (an attribute of sole proprietorships), and ambiguity in the distinction between dividends and salary for managers of private companies, which they are practically owned by them.

Thirdly, the fact that the company is not public creates fewer opportunities to raise capital, which undoubtedly affects its value. For this purpose, the value should be subject to appropriate adjustments. These adjustments are operated with the help of a qualitative discount factor

(discount for lack of marketability), which depends on other factors, like how liquid the assets of the company are, the size of the firm, whether it presents healthy financial situation, compared to the industry, the volume of gross cash flows (sales) produced by the enterprise as a result of its activity etc. Calculation is usually a regression of what the analyst considers that express these concepts (for example, health of the firm can be set the amount of net income, with appropriate adjustments) with a measure that acts as an impairment factor and can be for example the price of the restricted stock etc. (Damodaran, 2005), where data come from the firm's statements (fundamentals).

The fourth and final element of significance for the valuation of a private company is the control of management. The value of control premium in a private company stems from the fact that usually the main shareholder holds all managerial decisions of the firm, in a manner that management and property do match. Control premium consists of two factors. The first one relates to the possibility of a change managerial control withdrawing the potentially inefficient old management). To determine this possibility certain factors should be taken into account, such as legal restrictions on control exercise in cases of acquisitions, the percent of capital that remains in the hands of the current management, the rate of votes on the board of directors in relation to the shares etc. A second factor relates to the value of the acquisition of control in the company and can be split into two components. The first one is the present value of the new managerial decisions, in relation to the former ones, while the latter one concerns the collateral benefits of the change in administration, such as reputation for renewal, which may be translated consumer curiosity and buzz, therefore a potential increase in cash flow, etc. The first component clearly depends on the quality of decisions made by the current management so far, while the latter depends on not only on the legal right to control, but on convenience to exert real and effective control.

After having presented the main model and its private firms' implications we have to mention in brief certain accounting issues regarding appraisals (under IFRS or US GAAP). Valuation methodology in general makes certain assumptions, in order to be more practical in terms of implementation. An assumption of the highest importance is the quality of published financial statements, since they are the source of every fundamental element taken in account. All matters relating to the reliability of the financial statements are part of the overall thematic called quality of earnings.

A basic accounting principle that is often disturbed by accounting standards themselves is the clean surplus principle. That principle demands that net income reflects all changes occurred in net worth, except from transactions with shareholders (dividends, buybacks etc) (Feltham & Ohlson, 1995). This principle is disturbed by the accounting framework itself in several countries and on IAS. Disruption is fact when certain liabilities, revenues or expenses (non-operating, mainly) items may not be depicted in the balance sheet and kept outside the accounting cycle, even in a separate one. Such items may be adjustments arising from exchange differences, changes in fair value of financial derivatives (Frankel & Lee, 1998) etc.

Following the same pattern, there are cases where the exploitation of special cash or cash equivalent accounts retained by the firm is able to cover extraordinary events that may occur and to create extraordinary expenses, such as fire in uninsured goods etc (cookie jar accounting). This sort of exploitation can lead to distortion of the real value of the firm (Schilit, 2010). The result in this case is that the firm shows steady gains, even in years when operating profit is reduced or even below zero, reducing artificially the risk for a potential investor.

Another accounting issue comes from the accounting treatment of R&D items. In many cases there can be a choice between expensing and capitalizing and item like that. If the solution of

capitalizing is to be chosen, there will be an increase in net profit, in contrast with the choice of capitalizing. The result can be an overestimated value of the firm.

Distortion in estimating the value of a business can be caused by a change in methods of inventory valuation. FIFO (First-In-First-Out) affects more positive the net income than LIFO (Last-In-First-Out) (Weston & Brigham, 1986), leading to overestimation of the value of the firm. Therefore, it is likely that top managers may try to manipulate the value of the firm choosing a method that increases the net income.

Moreover, a change in depreciation method may also affect the outcome when it comes to firms with a high fixed-to-total assets rate, like the mining industry. The management of a firm may change the depreciation method for a newly obtained asset in a way that shifts the bulk of depreciation in the future, showing higher earnings in the present (Ball, 1972).

Finally, in cases of acquisitions the question of goodwill and goodwill impairment is raised. Goodwill arises when a company is acquired by another and the price is higher than the fair value (total assets minus total equity). Goodwill is stated on the assets of the business and the management reserves the right to impair it unless it determines that the fair value is lower than the historical cost (Lhaopadchan, 2010). Impairments reduces net income, thereby reduces the value of the firm, so the analyst must make appropriate adjustments where necessary to ensure the comparability of the company's value to the value of other firms to facilitate investors in taking decisions.

### 3. THE GREEK ACCOUNTING AND TAXATION SYSTEM AND ITS DIFFERENCES WITH IFRS

The Greek accounting scheme is rather law- than principle-oriented, pretty much like other continental schemes. The basic legislation corpus includes the corporation act No. 2190/1920 and the Greek General Chart of Accounts (GGCA) act No. 1123/1980. However, since legislature often intervenes in accounting issues, the general chart has been constructed in such a way in order to incorporate every change in tax law. As a result, tax laws intervene in extracting the final result of firms in a way that may differ from year to year. Below, we present a framework with the main (though not all) discrepancies between IFRS and the GGCA, as Karagiorgos & Petridis (2010) do mention.

*Table 1: Differences between GGCA and IFRS per concept – Continues on the next page*

Concept	GGCA	IFRS
<b>Inventory (IAS 2)</b>		
<b>Measurement method</b>	May differ from year to year, due to legislation.	FIFO
<b>Change in measurement method</b>	Difficulties to change from one method to another	Allowed, since it will lead to a better representation of accounting facts
<b>Income tax (IAS 12)</b>		
<b>Definition</b>	Considered as share of net profit before taxes to the state	Defined as an expense
<b>Classification</b>	There is not any distinction between current and deferred. The concept of deferred tax does not exist.	There is discrimination between current and deferred

<b>Depiction</b>	It is depicted upon a different statement that follows the income statement: the Table of Income Distribution	Included in the income statement
<b>Property, Plant and Equipment (IAS 16)</b>		
<b>Initial book writing</b>	When the firm gain ownership upon them	When 2 prerequisites occur: 1) possible economic benefits in the future, 2) the item cost can be reliably calculated
<b>Subsequent appraisal</b>	Cost of acquisition again, with an opportunity given by law to adjust the value of real estate specifically every 4 years (though the adjustment rates are being defined by the Minister of Economics and vary over time)	Cost of acquisition and an alternative opportunity of fair value appraisal
<b>Depreciation</b>	Rates that are issued by the Ministry of Economics and vary over time, not always depicting the real useful life of the asset	According to the useful life of the asset
<b>Leases (IAS 17)</b>		
<b>Classification</b>	No distinction between operational and financial leases	Distinction between operational and financial leases. Different accounting treatment of the two leases.
<b>Accounting for government grants (IAS 20)</b>		
<b>Grants for acquiring assets</b>	Required to be registered as credit in equity.	They can be registered as credits in the account "Next year revenues" or subtractively from the value of asset that is granted
<b>Provisions, Contingent Liabilities and Contingent Assets (IAS 37)</b>		
<b>Definition</b>	Like IAS 37, but additionally a provision requires certainty of a loss event in order to be registered, leaving only time and value of the event to be uncertain during the time the balance sheet is	When 3 prerequisites occur: 1) commitment of a fact in the past (legal or real), 2) possible resource outflow, 3) reliable way of evaluation of the provision
<b>Investment property (IAS 40)</b>		
<b>Subsequent value</b>	Always upon the cost of acquisition	Either on the cost of acquisition or the fair value

Of course there are specific tax laws and ministerial orders that change rates of depreciation or even change whole accounting issues year by year and in a way that an appraiser of private firms finds it hard to be accurate enough when adjusting such items. Moreover, the different structure of tax depiction upon the statements from the IFRS framework and the complexity of the firm taxation itself reinforce the difficulties of an appraisal and the necessity of the accuracy of adjustments.

To be more specific we will try to explain main aspects of firm taxation over time. First of all, in Greece there are several forms of companies, but what our analysis is concerned, we refer to limited partnership firms and SAs, though not the ones that have gone public. These company

forms' statements enjoy a form of publicity, though, through the obligation to publish them in newspapers and/or websites, making the statements reachable for a potential investor. The current main tax law is the No 4172/2013. In order to calculate the **tax base** we use the following table of a hypothetical example (Ginoglou, 2014), introducing additionally the reader to the relative terminology:

*Table 2: Tax base calculation for Greek private firms*

<b>TAX INCREASING TAX BASE</b>	<b>ITEM THE</b>	<b>TAX DECREASING TAX BASE</b>	<b>ITEM THE</b>	<b>EXPLANATION</b>
Net profit				The final result coming from the Income Statement, without measuring taxes, though.
Accounting differences				Taken in response only for tax calculation. It is not an accounting item.
		Revenue from shares		Net gains from financial investments in shares of other firms.
		Last years' loss		This component comes from the right to transfer old losses up to 5 financial years ahead, in order to reduce taxation, decreasing the tax base current.
Taxable profit (tax base)				The final tax base (also not an accounting item).

The presentation of the Table of Income Distribution follows, a statement that comes after the main Income Statement, where profit is distributed to the state (via taxes) and what is left to the owners or stays in the firm, in order to refinance certain plans and projects.

*Table following on the next page*



*Table 3: Table of Income Distribution and its items*

TAX ITEM INCREASING DISTRIBUTABLE PROFIT	TAX ITEM DECREASING DISTRIBUTABLE PROFIT	EXPLANATION
Net profit		The final result coming from the Income Statement, without measuring taxes, though.
	Last years' loss	This component comes from the right to transfer old losses up to 5 financial years ahead, in order to reduce taxation, decreasing the tax base current.
	Tax auditing differences	An item that includes several elements analyzed in section 4
	Other taxes, non regarded as operational (i.e. real estate taxes)	Other taxes, beside main tax (but not all of them)
	Tax base x tax rate = main income tax	The main income tax subtracted from net income

By deducting all these elements from net profit, we obtain the item **distributable profit**. The final payable tax is not yet calculated though, since there are several other components of it. However, for the appraising purpose the analysis stops with the calculation of the main income tax. The parts excluded from our analysis are regarded as debit of the cash and cash equivalents of the next year, a mixture, actually, of non-cash and cash components.

#### **4. THE ACCOUNTING ADJUSTMENTS UNDER THE GREEK GENERAL CHARTS OF ACCOUNTS: THE MODEL**

Our attempt here is to produce a model that adjusts accounting items in order to correctly evaluate a private firm. The model our model will apply on is the free cash flow to the firm. Two sets of adjustments are held: the first one contains non-cash items that need to be extracted from the model so as to better depict the free cash flows. The second one includes adjustments that need to be done because of the specifications of the Greek accounting schemes and intervening tax legislation, adjustments unnecessary when a firm under IFRS is about to be appraised. As far as the remaining two components of the model, we consider that there is no difference between the accounting items used to produce them under the GGCA and the IFRS.

Before making those two sets of adjustments we classified certain references on what adjustments should be made, taking in response the IFRS and US GAAP. Furthermore, there are included other adjustments, outside of the accounting framework, like excess owner compensation, that do not affect our analysis. Note that we only match those items that contain a different approach in the GGCA. Other items are just named to give a more complete picture. These adjustments are applicable to every valuation model that contains discounted cash flows, not just discount free cash flows to the firm.

*Table following on the next page*

*Table 4: Item adjustments according to references and application upon the GGCA*

TYPE OF ADJUSTMENT	APPLY ON THE GGCA
<b>LEONARD FRIEDMAN (2014)</b>	
Excess owner compensation	-
Fair market rent	Imputed rent cost, that is recognized by the tax authority as deductible and is edited in the books, although it is a theoretical item that may not have even been revised at the end of the year as positive accounting difference. It needs access to the books of the firm in order to be identified
Tax depreciation	-
Personal expenses	-
Travel and entertainment	-
Cash base to accrual base adjustments	-
Unreported income (tax evasion)	-
Non - recurring expenses	There is a separate item in the Income Statement for these expenses, alongside with unusual expenses
<b>FRANKEL AND LEE (1999)</b>	
Clean surplus relation (CSR)	Not a concept under the GGCA
<b>DE FRANCO ET AL (2011)</b>	
Underfunded defined benefit pensions	Not a concept under the GGCA
Operating leases	There is no distinction between operating and financial leases
Hybrid securities	-
Securitizations	-
Capitalized interest	-
Employee stock compensation	
Unusual and non-recurring items	There is a separate item in the Income Statement for this sort of expenses
Non standard adjustments	-
Inventory on a LIFO cost basis	-

The two sets of adjustments that were mentioned above are summed up on the table below:

*Table 5: Accounting adjustments, according to the model of the present paper*

INCREASING THE NOMINATOR ITEM	DECREASING THE NOMINATOR ITEM	COMPONENTS OF EQUATION 2.1)	SET ADJUSTMENT OF
Distributable profit		Net Income	-
Unusual and non-recurring items		Non-cash charge	Greek accounting and tax schemes
Depreciation		Non-cash charge	Non-cash charge
	Tax auditing differences	Non-cash charge	Greek accounting and tax schemes

While all the other adjustments function according to references mentioned above, the reasoning of the adjusted tax auditing differences needs to be further clarified. In the first it is suggested by Stowe (2007), as “a case that needs special attention”. Under the GGCA it means that tax authorities have audited closed financial years and have found discrepancies. Such discrepancies may be reported tax evasion, depreciation more than permitted by the law, which was not accounted as accounting difference in order not to increase the tax base, virtual costs, items that went expensed when they should be capitalized, non-recognizable provisions tax-wise. It may also include court orders for tax issues against the state (it serves as decreasing element of this item, taking a meaning of clearing between it and liabilities against the state). It is rather possible that this item distorts the net income picture as it consists of several elements, that are mean reverting to zero over time (unless the firm has a reported history of non-compliance with tax legislation and authorities) – and we have to mention that audits may refer to even ten years behind the current financial year. Following normative analysis, equation (2.1) transforms into a more accurate form, reflecting better Greek private firms’ free cash flows:

$$FCFF = \text{Distributable profit} + (\text{Unusual and non-recurring items} + \text{Tax auditing differences} + \text{Depreciation}) + \text{Int}(1 - \text{tax rate}) - \text{InvFixCapital} - \text{InvWorkingCapital} \quad (4.1)$$

## 5. LIMITATIONS OF THE MODEL

The produced model contains certain limitations that need to be clarified. At first, the potential information for a proper appraisal of a private firm in Greece is rather limited up to the level of the published statements. These statements are a simple form of Balance Sheet, Income Statement and Table of Income Distribution. So, there is not any chance for an appraiser to be more accurate a priori, unless he/she communicates with the owners and gets private accounting data. However, adjusting the nominator is a useful tool in the first place to come to a result of valuation. Furthermore, it is necessary to report that many of these items that we have taken in response may contain false elements in them. Again, a further examination of all items would require private accounting data, not available for any appraiser that has not the consensus of the

owner of the firm for the appraisal. Finally, the accounting framework from the financial year 2015 and on has radically changed, following a direction to convergence with IFRS. So the present analysis is significant for calculating free cash flows to the firm for all financial years until 2014.

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## SMALL BUSINESS IN RUSSIA AS AN ECONOMIC AND SOCIAL PHENOMENON

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### **ABSTRACT**

*Today small business is undoubtedly an important part of the national economies all over the world. Problematics of small business development turned to one of the most popular areas of study for the Russian researchers in the 1990s. After the market reforms started, large part of population believed that small business will become a source of wealth and prosperity as for them personally so for the society as the whole. This opinion united academic researchers and practitioners-entrepreneurs, so the activities of the latter gave the empirical material for the first. The main economic functions usually attributed to small businesses are the following: innovation, combating monopolies and maintain a competitive environment, combating unemployment and creating jobs, increasing income of the general population and, consequently, the expansion of consumer demand, increase the professional activity, the development of entrepreneurial skills, spirit, and traditions. Social role of small business is considered its being an important institution of civil society and the kernel of the middle class formation as a basis for socio-political stability of the state. In the earlier research of the author it was concluded that in now-day Russia small business does not perform properly the functions attributed to it by economic theory. Its contribution to innovation is modest. Its antimonopoly role does not fit the theoretical position. The role in job creation is noticeable but it is not accompanied by the role in income creation and by the appropriate indicators of business productivity. The aim of current research is to identify and to explain the specifics of small business in Russia in context of economic theory and social processes based on statistical and factual information.*

**Keywords:** *small business, entrepreneurship, innovation, competitive environment, income in small businesses*

### **1 INTRODUCTION**

Small business is an integral and indispensable element of a modern market economy. More than big business it is characterized by a direct relationship with the public that is determined by its mass, the predominant orientation to the needs of people, the spatial dispersal.

In different countries, the characteristics of small businesses vary within wide limits. This applies to the parameters according to which the entity belongs to the category of small businesses, as well as to the social position and role of small business, to the scope and areas of economic activity and to its results. However, in general, the state of small business is a reflection of the state of the economy and society, emerging in the country in a certain period of time. From this standpoint, in our opinion, it is necessary to analyze the state of small business for the decision-making on its regulation and development.

The aim of this paper is to identify and explain the specifics of small businesses in Russia in the context of economic theory and contemporary socio-economic processes. In a study of Russian small business as a socio-economic phenomenon, by our view, it is necessary to take into account the heterogeneity of the territorial socio-economic development within the country.

## **2 DATA SOURCES AND METHODOLOGY**

The present study is based on three types of information sources:

- 1) theoretical scientific works of modern researchers on the sociology of business and economics;
- 2) data from surveys of entrepreneurs, held in Russia for various purposes in the period from 2006 to 2014;
- 3) data of the state statistics presented on the official website of the Federal Service of State Statistics (Rosstat) [www.gks.ru](http://www.gks.ru), collection of materials "Small and medium business in Russia", by the end of 2014, published by Rosstat in December 2015.

Starting in 2010 Rosstat publishes the main indicators of small and medium-sized businesses annually by the results of SME surveys. It should be noted that in 2016, Rosstat plans to carry out a total federal statistical supervision over the activities of small and medium-sized businesses for 2015. The results of total observations will clarify the data on the sector, which now is mainly collected on a sample basis. The first results should be published in 2017 on the site of Rosstat.

The methodology of the study constitute logical analysis allowing to map the actual situation and theoretical models, methods of statistical analysis for structure and dynamics of complex objects and processes.

## **3 MAIN POSITIONS AND RESULTS**

### **3.1. Social Portrait of Russian entrepreneur**

Small business in Russia appeared in the 80s of the last century. In the framework of traditional economic structures no independent subjects of production were created for entrepreneurial initiatives, but they really became prerequisite for the development of small businesses. In the late 80s the changes in political, social and economic spheres of the country have provided for some enterprising people the opportunity to engage in business activities on a legal basis. There were created first cooperatives, unions, business associations, members of cooperative movement; the Union of Soviet managers was established.

Neither in other countries nor in Russia a common economic theory of entrepreneurship has not yet established, although the need for such a theory is very relevant. In the development process of scientific understanding of business practices, as a rule, three waves reflecting the development of the theory of entrepreneurship are distinguished (Brunova, 2010).

The first wave came in the XVIII century and is associated with awareness of risk as a factor of business. The second wave is associated with the release of innovation as the main distinctive feature of the business. The founder of this strand is J. Schumpeter. The third wave focuses on the special personal qualities of the entrepreneur and the role of business as a regulatory principle in the economic system.

The current stage of development of entrepreneurship theory can be characterized as the fourth wave, the essence of which is the emphasis on the administrative aspect, and therefore - transition to a multi-level analysis of business problems becomes necessary (Rasskazova, 2008).

We agree with A.V. Kruglov (Kruglov, 204) who said that "the Russian business is quite a unique phenomenon", and even from the point of view of business the Russian and the foreign entrepreneurs solve basically different problems.

Researchers, for example P.A.Guryanov (Guryanov, 2011), note that the model of an entrepreneurial culture, which began to form in Russia since the late 80s is significantly different from the traditional model, developed by the early 20th-century and largely determined by the Orthodox ethics, which characterized by

- no ideas of wealth for wealth;
- confession of the righteousness of the wealth obtained by work;
- awareness of the necessity of public utility of entrepreneurship;
- charity as an essential condition for the salvation of soul;
- high level of trust and honesty in the business environment (Rumyantsev, 2008).

According to researches current motivation for doing business is quite different. Its priorities are shown in Tab. 1, which contains the results of Russian entrepreneurs surveys. Predominance of motives related to family and personal material interests is evident as well as low level of prestige and public benefit motives.

*Table 1: Distribution of answers to the question "What attracts you most in your work?"  
(Motivation structure, 2006)*

Motivation	%
High income	56.9
Ability to take the initiative	27.7
Interesting work	16.8
Ability to transfer their business by inheritance	58.1
Reliable workplace, job security	5.3
Ability to achieve something.	24.5
Possibility of career development, prestigious post	3.9
Opportunity to work with highly qualified colleagues	2.6
Possibility to benefit society, contribute to the revival of the economy	7.9
Possibility to see certain results of your labor	48.6

By available data, 80% of entrepreneurs are men and 20% - women. Their average age varies from 30 to 45. Most of them have got education, clearly understand their goals and the ways to achieve them, aware of the risks (Theoretical aspects, 2014). More than half of entrepreneurs combine the functions of managers and owners (co-owners) of business. For most entrepreneurs doing business is the main occupation. However, there are also those who still keep their jobs in state institutions as a kind of insurance.

According to the Global Entrepreneurship Monitor, in 2013 in Russia 9.1% of respondents considered they are businessmen (compared to 6.3% a year earlier), including 5.8% of respondents who called themselves starting businessmen. More than one third of those surveyed business owners consider they are "forced entrepreneurs" and have no other income opportunities. This figure in Russia is traditionally higher than in other countries with a similar economic structure (Edovina, 2014).

Not less than 14.5% of the respondents are in fly-by-night business (Edovina, 2014). The high share of illegal business can be attributed to the fact that in a period of low economic growth

people are trying to find additional sources of income and are willing to take risks, including the risk of conflict with the law.

### 3.2. Economic results of small business

Prior to 2015, the following criteria for inclusion of an economic entity for small businesses (Tab. 2) have been established in Russia. Since 2015 value of revenue criterion have changed. For microenterprises the limit is set at the level of 800 mln rubles, for small businesses - 2 bln rubles. This change will make it more difficult to compare dynamic data in future.

*Table 2: Criteria for Small Business*

Category of small businesses	Employment in the enterprise	Revenue of the enterprise	The criterion of origin independence
Microenterprise	< 15 persons	< 60 mln rub.	The share of Russian Federation, subjects of Russian Federation, municipalities, public and religious organizations in the capital of enterprise not more than 25%, the share of foreign legal entities and (or) legal entities which are not SMEs - not more than 49%.
Small enterprise	16 - 100 persons	< 400 mln rub.	

In the theory of entrepreneurship simultaneous emergence of a large number of businesses supposes a certain social situations when the ideological, political and / or socio-economic conditions provoke so-called "entrepreneurial boom." There are three theoretical models that explain the quantitative growth and development of small business:

in the model of economic downturn unemployment is considered as the main factor contributing to the increase in the number of small businesses;

in the revenue growth model increasing the number of small enterprises is determined as response to increasing demand for products and services;

in the innovation model surge of new enterprises is explained by the emergence and development of new technologies. (Keeble, 1990)

During 2010-2014 the number of small businesses showed positive dynamics. The number of micro- and small enterprises in 5 years has grown by 28% - from 1644.3 thousand in 2010 to 2,103.8 thousand in 2014. The number of microenterprises in 2014 has increased by almost a third compared with 2010 and reached 1868.2 thousand.

In 2014, the sector of small and medium-sized businesses the most part was constituted by sole proprietors (unincorporated) -. 2.4 million or 53.3% of all the sector and microenterprises - 1.9 million or 41%. Small businesses constituted 5.2%. At the same time in the micro enterprises and individual businesses more than half of personnel of SME sector is employed - 55%.

Economic indicators of small enterprises are given in Tab. 3.



*Table 3: Main economic indicators of small enterprises, 2010-2014*

Indicator	Small enterprises									
	total					including micro-enterprises				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
number of enterprises (by end of year), thous.	1644.3	1836.4	2003.0	2063.1	2103.8	1415.2	1593.8	1760.0	1828.6	1868.2
Average number of employees, without external part, thous.	9790.2	10421.9	10755.7	10775.2	10789.5	3320.0	3864.4	4248.9	4322.9	4431.1
Revenue of enterprises bln rub.	18933.8	22610.2	23463.7	24781.6	26392.2	5609.2	7028.3	8347.4	9101.3	9699.3
Average monthly salary of employees, rub.	12367	15743	16711	17948	19201	10612	12855	13898	15039	15774
Revenue per employee, mln. Rub.	1.93	2.17	2.18	2.30	2.45	1.69	1.82	1.96	2.11	2.19
The average salary in economy, rub.	20952	23369	26629	29792	32495	20952	23369	26629	29792	32495
The ratio of average salary in the small business to that in economy, %	59.02	67.37	62.76	60.24	59.09	50.65	55.01	52.19	50.48	48.54

In our opinion, it is clear that salary about two times less than the average in the economy, whose purchasing power, in turn, significantly less than the purchasing power of average salary in developed countries, is not an attractive factor for employment in small business. The salary level confirms that for a large part of employees employment in small business it is forced due to the lack of employment opportunities in large enterprises of the private and public sector, that the main motive for participation in small business to a large extent is the threat of unemployment and the complete loss of income. As the second reason that could explain such

low salary reflected in official statistics should be specified a large illegal component in a small business.

As the positive reflecting the efficiency of small businesses faster growth of small business revenue compared to the growth of employment can be perceived. During 5 years revenue of small enterprises grew 1.31 times, while the number of employees increased by 1.10 times (for micro- enterprises corresponding figures were 1.73 and 1.33). However, if we take into account that the inflation annual rate was stable over 6%, we can say, at best, about the constant revenue accompanied by the number of employee growth. Throughout the 5 year period, in one small business 6 persons were employed on average, in microenterprises - 3 persons.

The number of small businesses distribution pattern in the federal districts of Russia in 2014, shows an uneven distribution of enterprises (Fig.1). According to the number of small enterprises, including micro, the Central Federal District and the Volga Federal District leading - respectively, 27.3% and 17.5% of the total number of small and micro enterprises. In third place Northwestern Federal District, which has 15.8% of all small businesses, on the fourth - Siberian Federal District with 14, 4% of all micro and small enterprises. Other districts do not exceed 10% of micro and small enterprises total number.

The regional structure of employment in small business is the following. Central FD is leading in terms of employment in small enterprises - it occupies 30.6% of the total number of employees in the segment of small and micro enterprises. In the second place - the Volga FD employing 21.4%, in the third place - Siberian FD with 12.6% of the employed.

Figures of small and micro-enterprises revenue for the districts listed above are, respectively, 36.6%, 18.3% and 10.7%.

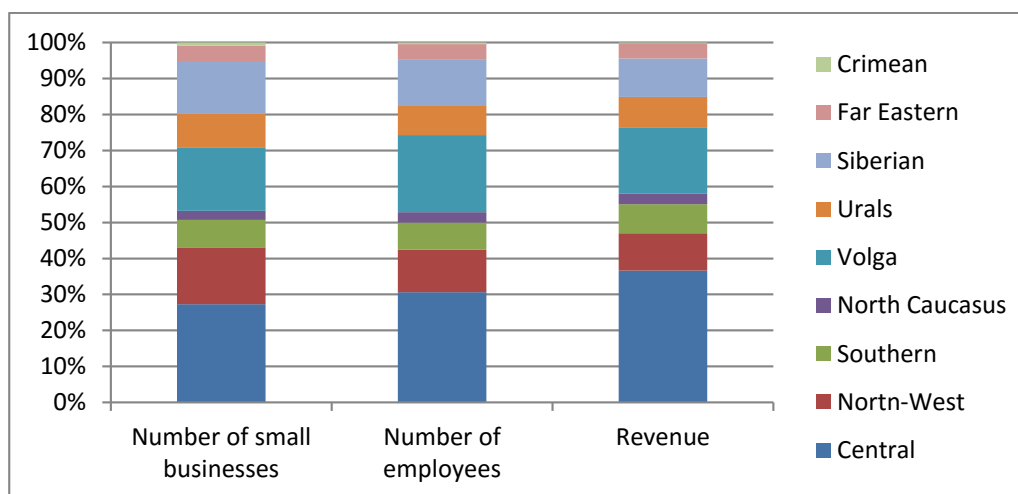


Fig. 1: Regional structure of the number of small businesses, the number of employees and revenue

The branch structure of small business in 2014 is shown in Fig. 2. The share of enterprises engaged in trade and repair accounted for 38.7%. 20.3% of small enterprises operated in the sphere of real estate operations, rent and services. Currently, a small business in Russia acts primarily as an intermediary between producers and consumers, preferring sphere with a fast turnover. The existing structure does not allow a small business as a whole to be considered the carrier of innovation or innovation driver. The reduction of the role of small business to mediate limits the potential of the real sector of the economy (Ketko, Zarafutdinov, 2011).

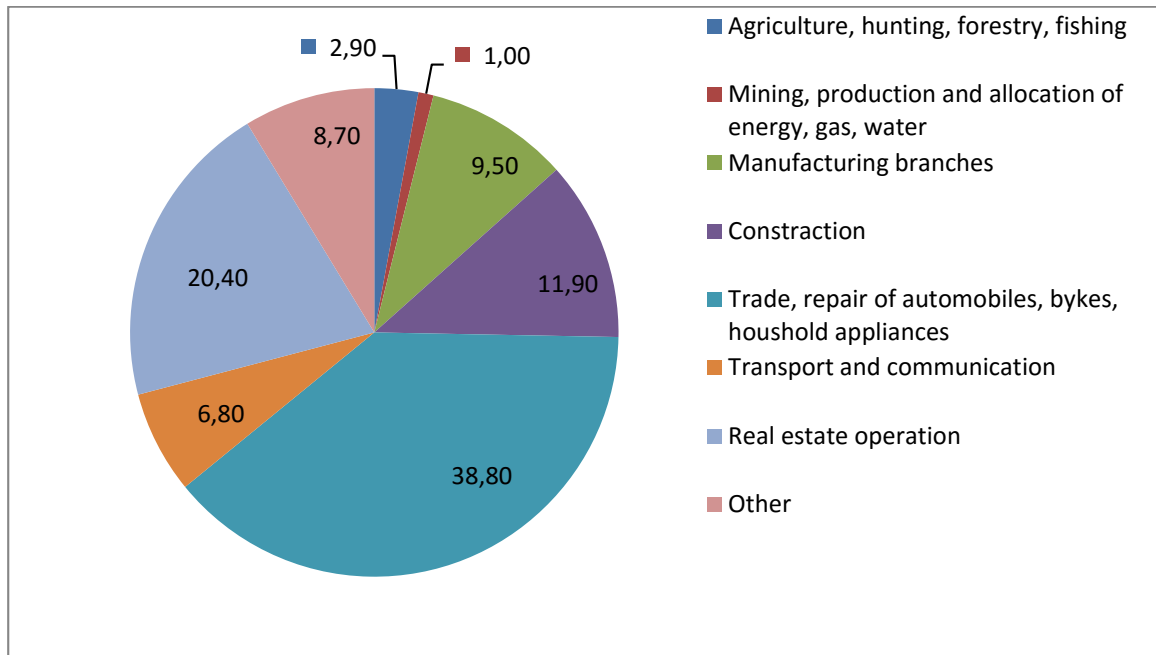


Fig. 2: The branch structure of small business in 2014

In 2014, the ratio of profitable and loss-making enterprises of micro and small businesses amounted to 80:20, i.e. every fifth company was unprofitable (tab. 4). A similar ratio was observed in previous years.

Table 4: Financial results of small businesses in 2010-2014

	Number of enterprises	including			
		Profitable enterprises		Loss-making enterprises	
		number of enterprises	profit, mln rub.	number of enterprises	loss, mln rub.
Micro-enterprises					
2010	435 119	347 183	457 694	87 936	216 676
2011	406 206	331 200	369 548	75 006	170 479
2012	500 314	412 360	715 371	87 954	177 090
2013	1 155 668	931 644	1 297 496	224 024	447 613
2014	1 328 352	1 061 436	1 648 981	266 916	749 455
Small and micro-enterprises					
2010	525 399	416 778	868 401	108 621	332 407
2011	495 484	402 641	776 796	92 843	302 628
2012	602 698	496 030	1 256 205	106 668	305 994
2013	1 344 849	1 082 082	2 093 226	262 767	656 174
2014	1 530 294	1 219 954	2 548 634	310 340	1 337 684

Dynamics of the ratio of small enterprises, including micro-, total net financial result to the total revenue is shown in Fig. 3. Over the past 5 years, this figure peaked in 2013 and amounted to 5.80%. In 2014, the figure was 4.59%. Thus, total profitability of the small business sector amounted to 4.81% in 2014, which does not allow affirming the economic efficiency of small business as a whole.

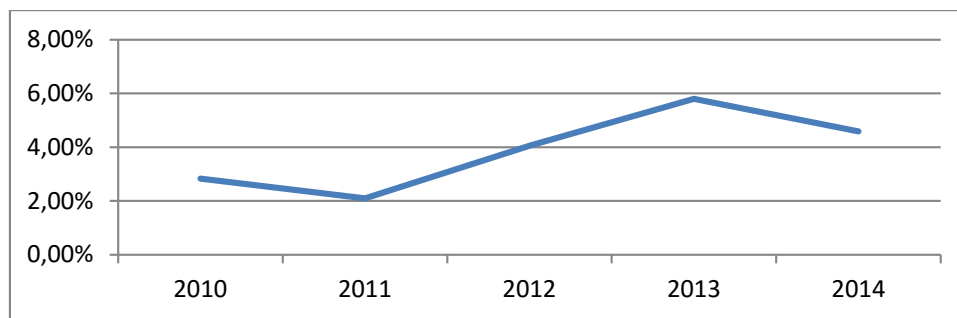


Fig. 3: The dynamics of the ratio of net financial result to revenue of small businesses

Also it should be noted that the average revenue of small enterprises in 2014 amounted to 17.25 mln rub., which is much lower than the statutory limits. This fact reinforces the assertion that the scale of the economic activity of small enterprises vary widely. Legislatively established possibility of increasing revenue in the current situation is hardly an incentive for most small businesses.

Thus, the inclusion of 2014 data to the analysis helped confirm the earlier conclusion that most clearly manifested features of small business in Russia in modern conditions are self-employed and meet the demand in the local markets, which is particularly important in the framework of import substitution policies (Antokhina, Guzikova, Vidyakina, 2015).

In 2015, the auditing firm KPMG conducted a survey of small and medium-sized businesses in Russia to identify problems that hinder small business development. In the survey of more than ten thousand questionnaires and 578 comments, in which the businessmen describe their difficulties informally were collected in 82 regions of the country (Expensive loans, 2015).

The most urgent problem was called the limited access to financial resources, noted by 50% of respondents. Also were noted the difficulty of obtaining credit for the long term, high interest rates and the inability to get a loan with deferred payments extinctive. In previous years, the most urgent problem of the small business owners called a bad business climate. Now the financing difficulties came in the first place as the crisis in the economy continues. It may be noted that the representatives of the government see the reason for this situation in the high level of inflation and associate prospects of its change with the control over inflation and its decline to 4-5%.

Bad business climate appeared in 2014 the second topical issue that noted 30% of respondents. The problem manifests itself in frequent changes in legislation, bureaucracy, frequent inspections and a lack of interest in the development of entrepreneurship from municipal authorities.

In 2015 federal law was issued according to which the state and municipal routine inspections of small businesses are prohibited for the period from 1 January 2016 on 31 December 2018. The law does not apply to fire, environmental, radiation surveillance, control in the field of state secret protection and use of nuclear energy. However, in recent period, regulations have been adopted aimed at increasing fiscal and non-fiscal burden on small business and the establishing new administrative barriers, which exacerbates the situation of small businesses on the background of economic crisis (Kalinin, 2015).

The low training of young cadre was named as the third of urgency. Among the topical issues were also attributed difficulties of access to markets, of search for goods and services suppliers,

of access to production technologies, training and infrastructure. In the comments entrepreneurs mentioned high taxes and an increase of tax burden, competition, illegal business, growth of retail chains, actively interacting with the "administrative resource", the high cost of connection to the power grid, the electricity tariffs.

According to the own entrepreneurs' opinion the state should support primarily intellectual production (computer science, science, art). Further the industry of the means of production and other producing sectors (construction, production of consumer goods, raw materials) were pointed. According to experts, not producing industries - service sector, trade and finance - need the support least of all (Golubev, 2003).

The survey of Alfa-Bank (Anikeva, 2015) identified that owners and managers of small businesses currently see their main objectives in searching and attracting more customers, increasing profitability, reducing costs, penetrating to new market segments, searching partners and suppliers. A significant part of small businesses have revised sales models, pays more attention to measures to increase customer loyalty, offers new products and services and working on their quality, invests in staff training. Thus, inflation and the growing complexity of the economy generate entrepreneurs striving to survive and strengthen their positions in the market.

#### 4 CONCLUSION

The current state of small business in Russia is determined by the general economic downturn, The situation in small business is characterized by a gap between the aspiration of the majority of entrepreneurs to achieve tangible goals, motivating them to engage in business, and actually achieved results. Significant part of entrepreneurs is forced to participate in business, in particular, under the threat of unemployment. In general, neither motivation for enrichment nor forced involvement in business contributes to stabilization and development of the small business economy and its adoption of the innovative role.

In recent years, there is an increase in the tax burden on the background of certain administrative relaxations that due to general decline in incomes and the prevailing motivation for enrichment can lead to the expansion of the informal, uncontrolled by state sector. Expansion of quantitative criteria of small business in terms of turnover meets the interests of a small number of businesses without affecting the interests of the majority.

There is enough well-formulated range of small business concerns, which should serve as a guide in the development of policies related to small business, in which the main emphasis should be placed on the regional level allowing to take into account the regional specificities and differences. An important condition that can ensure the survival of small businesses in the economic downturn is their understanding the need to change approaches to business model and working methods.

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## A LITERATURE REVIEW ON SUPPLY CHAIN MANAGEMENT EVOLUTION

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### **ABSTRACT**

*The purpose of this paper is to create a better understanding of what Supply Chain Management (SCM) is how it has evolved and the factors that have influenced its evolution. Through examining the literature, this paper will highlight the evolution history of SCM and the factors that have affected it. According to this paper, the evolution history of SCM can be segmented into four stages: 1) the pre SCM stage, 2) the creation stage, 3) the integration stage and 4) the globalisation stage. In the last part of the paper will be discussed the factors that have affected the evolution process of SCM. Some of these factors are: the firms focus on cost reduction; increased global competition; the firm focus on increase efficiency and performance; consolidation of trade liberalisation policies and the globalisation movement; increasing retail concentration - centralisation and power; and increased companies focus on customer satisfaction.*

**Keywords:** *Supply Chain, Supply Chain Management, Supply Chain Management evolution*

### **1. INTRODUCTION**

Over the past decade, the traditional purchasing and logistics functions have evolved into a broader strategic approach to materials and distribution management known as SCM. This paper aims to review the SCM evolution and the factors that have influenced it. By identifying these factors, we will get more insights on SCM.

Various definitions of SCM have been offered over the past 20 - 30 years, but none of these definitions is universal. The lack of a universal definition of SCM is in part due to the way the concept of supply chain has been developed (Croom *et al*, 2000). The concept of supply chain has been considered from different points of view in different bodies of literature. Such a multidisciplinary origin makes it difficult to come up with a universal definition of SCM. Despite of the barriers to make a universal definition of SCM, Mentzer *et al* (2001) attempt's to synthesize two definition, one for supply chain and one for SCM, by extensively examine various definitions of the terms "supply chain" and "Supply Chain Management". Their definitions are:

A supply chain is a "set of three or more entities directly involved in the upstream and downstream flow of products, services, finances, and information from a source to the customer" (Mentzer *et al.*, 2001, p. 4).

Supply chain management is "the systematic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purpose of improving long-term performance of the individual companies and the supply chain as a whole" (Mentzer *et al.*, 2001, p. 18).

In the first part of this paper, is given the SCM evolution history, where the latest concept introduced is the Global Supply Chain Management (GSCM). Firms are much bigger than they used to be, and they have achieved economies of scale and with the establishment of trade liberalisation policies they are internationalising their businesses to find the lowest sources of inputs and growing markets to sell their products. The concept of SCM is not enough for being

efficient and competitive in the new environment that is why new concept and management strategies are emerging. By looking at the evolution history of SCM, we clearly can see that there are huge changes in the way firms used to operate in the chain and the way they are operating now. What are the factors that have contributed to SCM evolution? In the last part, this paper aims to answer to this question, by reviewing the SCM literature and by deducting conclusions from the above evolution history. It should be noted that, there are linkages between the factors that have influenced the evolution of SCM and the factors that affect the supply chain performance because with the evolution of the SCM the performance of supply chain has increased.

## 2. SUPPLY CHAIN MANAGEMENT EVOLUTION

During 1950s and 1960s the concept of SCM was unknown, and in this period, new product development was slow and counted only in the firm own technology and capacity. Inventory cushioned bottleneck operations in order to maintain a balanced line low, resulting in huge investment in work in process (WIP) inventory (Tan, 2001). Furthermore, issues concern with purchasing was neglected by managers at that time, since purchasing was considered as a service to production (Famer, 1997). Increasing production was the main objective of this period; little emphasis was on cooperative and strategic buyer supplier partnership. According to Tan (2001), sharing technology and expertise with customers or suppliers was considered too risky and unacceptable.

Tan (2001) argues that, in the 1970s, managers became aware of the huge WIP on manufacturing cost, new product development, quality, and delivery time. One of the factors of this increased awareness was the introduction of Manufacturing Resource Planning (MRP). The focus in this period changed; it was not just increase production through spreading the fixed cost to a bigger output (economies of scale), rather, to increase performance. The introduction of IT (MRP) in planning the resources of the firm proofs this.

During the 1980s and early 1990s, firms dealt with increased demands for “better, faster, cheaper logistical service”. As a result, many manufacturers outsourced logistics activities and their focus transferred to core competencies (Daugherty, 2011). According to Daugherty (2011), the outside specialist presented an economically viable means of achieving productivity and efficiency. Therefore, many manufactures went more for a relationship – oriented approach with their supplier and customer. They understood the benefits of cooperative relationship with the other firms in the different chain levels (Stank *et al*, 1999). Stank *et al* (1999), show in their paper some of the advantages and benefits that this cooperative relationship had: synergy gain through shared expertise and resources, better planning and support, exchange of information, and joint problem solving. Another reason that influenced the partnership between supplier – buyer was the increased global competition (Tan, 2001).

The introduction of Enterprise Resource Planning (ERP) in the 1990s, gave a boost to the evolution of the SCM and buyer - supplier relationship. Movahedi *et al* (2009) argues, while EDI - Electronic Data Interchange systems were concerned mainly with inter – organizational integration, ERP systems were concern mainly with intra - organizational integration. The evolution continues in the 21st century with the development of more sophisticated IT systems (internet - based solution systems), which are concerned for both inter-organizational integration and intra-organizational integration. Moreover, the relationship buyer – supplier in this period have gone one-step forward, from normal partnership to long-term relationship and strategic alliances. Manufacturers and retailers now commonly exploit supplier strengths and



technology in support of new product development, distribution channels, cost reduction etc. (Morgan and Monczka, 1995).

The latest trend of evolution in the SCM is the movement towards systems of supplier relations over national boundaries and into other continents (Movahedi *et al*, 2009). GSCM is the latest concept introduced to the literature of SCM. Firms are much bigger than they used to be. They have achieved economies of scale and with the establishment of trade liberalisation policies they are internationalising their businesses to find the lowest sources of inputs and growing markets to sell their products. The concept of SCM is not enough for being efficient and competitive in the new environment that is why new concept and management strategies (i.e. GSCM) are emerging. An integrated supply chain gives considerable competitive advantage to the individual actors participating in the chain. In the developed economies, there is a switch from firm – firm competition to chain – chain competition (Koh *et al*, 2007; Lummus *et al*, 1998, Morgan and Monczka, 1996, Anderson and Katz, 1998).

Some authors have segmented the evolution of supply chain management into stages (Movahedi *et al*, 2009; Ballou, 2007). Movahedi *et al*, (2009) segmented SCM evolution into three stages:

1. Creation era, starts (1980s) when the buyer – supplier understood the benefits that a cooperative relationship offers. In this period, we encounter for the first time the term SCM.
2. Integration era, starts (1990s), the IT systems (ERP, EDI etc.,) are introduced. These systems focus not only in managing the resources of the individual firm but also the resources of the integrated supply chain.
3. Globalisation era starts with the creation of the trade liberalisation policies and the establishment of institution such as World Trade Organization (WTO) and other international institutions that deal with global/regional trade policies.

According to Ballou (2007) SCM is not new; it is an evolution of purchasing and distribution function. The integration of these two functions has generated what we call SCM. Figure 1 shows the evolution of SCM as described by Ballou (2007). He has segmented the evolution of SCM into three stages.

- Activity fragmentation – 1950s and 1960s
- Activity integration – 1960s to 2000
- Supply chain management – 2000+

*Figure following on the next page*

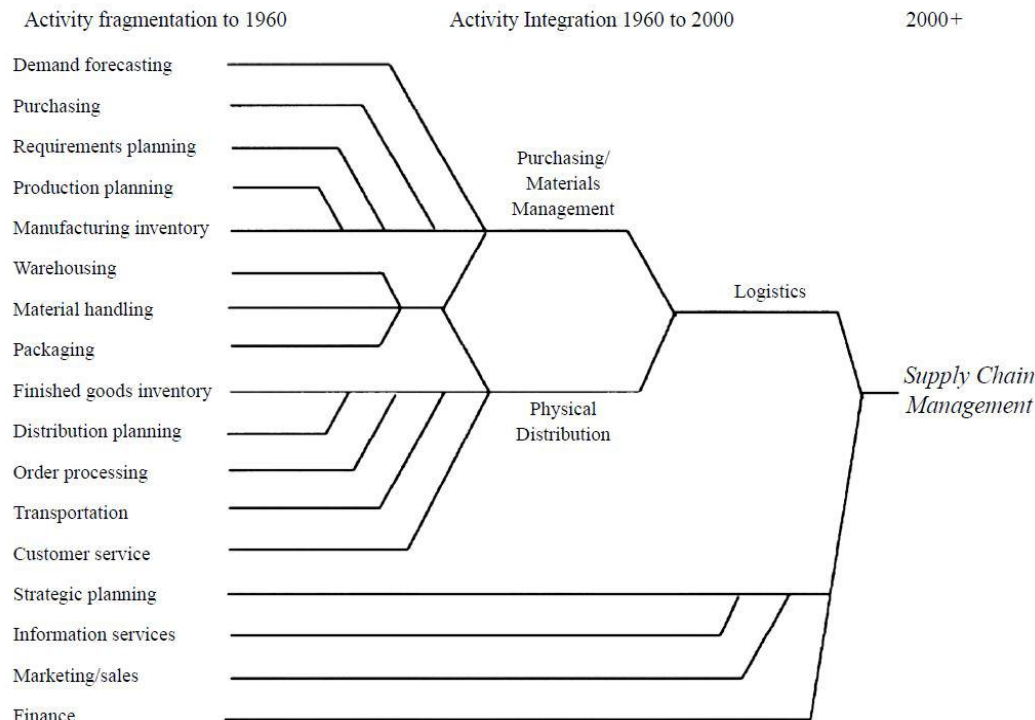


Figure 1: Supply Chain Evolution (Ballou, 2007)

As it can be seen from the Figure 1, in the first stage the activities (from purchasing raw materials to finished product in the shelf of a retailer) are fragmented, there is no integration between them. As a result, the cost of finished products (transportation cost, inventory cost etc.) are high. In the second stage, there is some integration between the activities but still not fully integrated. The SCM 2000+ is the last stage where all the activities are fully integrated leading to cost reduction, shortening of the new product development process, better flow of information, improved cash flow, faster order fulfilment, and increased customer satisfaction. From the SCM literature, it comes out that customer satisfaction is one of the key driving factors of SCM evolution.

### 3. FACTORS THAT HAVE AFFECTED SCM EVOLUTION

This part of this paper tries to identify the factors that have affected the SCM evolution by reviewing the SCM literature. Three factors emerge from the papers of Porter (1994), and La Londe and Masters (1994) for their influence on the SCM evolution. These factors are:

1. The focus of firms to reduce cost
2. The increased global competition
3. Firms objective to increase efficiency and performance

By looking at the evolution of SCM described above, the author deduces that these three factors have influence the evolution during the 1980s and early 1990s. During that period, firms faced increased global competition. Furthermore, the firms' main objectives in those years were how to reduce cost, increase efficiency and performance. By experimenting with strategic partnership, manufactures realized the benefits of an integrated SCM (Tan, 2001).

Another factor that has influenced the evolution of SCM is the implementation of IT systems like EDI and ERP in the process of SCM (Movahedi et al, 2009). According to Ellram *et al.*,

(1989) IT systems like EDI have a critical role in SCM. The evolution in these IT systems clearly has an impact on the evolution of SCM.

Also the consolidation of trade liberalisation policies has led to the evolution of SCM to GSCM. Manufacturers are establishing their factories in countries, which have low inputs, cost (global sourcing). As well, they are expanding their markets into developing countries. These countries have growing markets not saturated one like the developed countries.

The above factors are those that have shaped the SCM that exist now days. In the author's opinion the factors that are affecting the SCM evolution now days in developed countries are:

- Increasing retail concentration – centralisation and power
- Changes in customer needs
- Increased companies focus on customer satisfaction
- Concentration of manufacturing sector and absorption into multinational companies

#### 4. CONCLUSION

This paper reviewed the evolution of SCM and the factors that have influenced it. From this came out that the SCM evolution history can be segmented into four stages:

1. The pre SCM stage
2. The creation stage
3. The integration stage
4. The globalisation stage

In the last part of this chapter were discussed the factors that have affected the evolution process of SCM. Some of these identified factors were:

- The firms focus on cost reduction
- Increased global competition
- The firm focus on increase efficiency and performance
- Consolidation of trade liberalisation policies and the globalisation movement
- Increasing retail concentration – centralisation and power
- Increased companies focus on customer satisfaction

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## ASSESSMENT OF THE NEW REGULATORY FRAMEWORK OF THE REPUBLIC OF LATVIA ON ANNUAL FINANCIAL STATEMENTS

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### ABSTRACT

*In accordance with the Directive 2013/34/EU of the European Parliament and of the European Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC, the Saeima (Latvian Parliament) has adopted the Law "On Annual Financial Statements and Consolidated Financial Statements" and the Cabinet Regulations based thereof taking effect on 1 January 2016, on 22 October 2015. Due to the fact that starting from 2016 all subjects of the Law "On Annual Financial Statements and Consolidated Financial Statements" must comply with the new requirements, subject of this article is very topical. Having studied the new regulatory framework, the authors consider some of its shortcomings to be a problem, which are identified, assessed in the article and recommended solutions to address them are proposed. The authors defined the objective of the research as follows: to draw up proposals on improvements of the drafting procedure of annual financial statements and its regulatory framework in the Republic of Latvia following the research of the Law "On Annual Financial Statements and Consolidated Financial Statements" and the related laws and regulations and their comparison with a pre-existing regulatory framework. There was a limitation of the topic, because the authors did not study the requirements on consolidated annual financial statements in their work.*

*The article is based on the research of annual financial statements, requirements regarding their drafting and auditing, and accounting terminology applied in the annual financial statements. Significant differences in pre-existing regulatory framework and the new regulatory framework were indicated, problems were defined related to the definitions of accounting terms, elements of annual financial statements, and auditing of annual financial statements in the research, resulting in proposals, which could be taken into account, when drawing up the annual financial statements and supplementing the regulatory framework of the Republic of Latvia.*

**Keywords:** *accounting, accounting terms, audit, financial reporting, legislation*

### 1. INTRODUCTION

Annual reporting requirements of the Republic of Latvia from 2016 are set forth by the Annual Accounts and the Consolidated Annual Accounts Law adopted according to the Directive 2013/34/EU of the European Parliament and of the European Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC. As of 1 January 2016, the laws that have so far determined the requirements of drafting of annual financial statements

and consolidated annual financial statements, including the Law “On Annual Accounts” and the Law “On Consolidated Annual Accounts” shall be null and void. While assessing topicality of this issue, the authors define the objective of the study as follows: to draw up proposals on improvements of the drafting procedure of annual financial statements and its regulatory framework in the Republic of Latvia following the research of the Annual Accounts and the Consolidated Annual Accounts Law and the related laws and regulations and their comparison with a pre-existing regulatory framework. To achieve this objective, the following tasks should be met:

- To examine, compare, and assess accounting terms in the new and pre-existing regulatory framework,
- To compare and assess the structure of annual financial statement for different categories of companies,
- To study and provide conclusions on the new requirements regarding annual financial statement verification and accountability,
- To develop proposals for improving the drafting procedure of annual financial statement and its regulatory framework.

Structure of the paper is drafted to achieve objective and tasks of the study. The authors did not study the requirements on consolidated annual financial statements in their work in this study. The researchers used the requirements of the laws and regulations of the Republic of Latvia, EU Directive, and opinions of the authors about the chosen topic.

## **2. STUDY AND ASSESSMENT OF THE DEFINITIONS INCLUDED IN THE ANNUAL ACCOUNTS AND THE CONSOLIDATED ANNUAL ACCOUNTS LAW OF THE REPUBLIC OF LATVIA**

When keeping the accounting and drafting an annual financial statement, accounting terms must be properly understood and applied accordingly. It is important for the companies of the Republic of Latvia, to which the Annual Accounts and the Consolidated Annual Accounts Law applies and which shall draft an annual financial statement in accordance with the requirements of that Law and the Cabinet Regulations based thereupon, that the regulatory framework include complete and comprehensible definitions of applicable accounting terms. The Annual Accounts and the Consolidated Annual Accounts Law applies to:

- “1) Business companies, co-operative societies incorporated in the Republic of Latvia, European Economic Interest Groupings, European co-operative societies and European business companies incorporated in the Republic of Latvia;
- 2) Individual businesses, farms and fisheries with a turnover (revenue) from economic activity exceeding 300,000 euro during the previous reported year” (Annual Accounts and the Consolidated Annual Accounts Law, 2015).

Having carried out a detailed comparison of accounting terms in the new Annual Accounts and the Consolidated Annual Accounts Law and previously valid annual Accounts Law, the authors concluded that the new regulatory framework included a lot more definitions of accounting terms than before. The Annual Accounts and the Consolidated Annual Accounts Law also defines such concepts like *balance sheet*, *balance sheet date*, *development costs*, *relevant information*, *intangible investment*, *the FIFO method*, *the weighted average price method*, etc. The authors also point out that some terms such as *fair value* are defined differently in the pre-existing Law and the new Law. With regard to terms such as *financial instruments*, *equity securities and transferable securities*, the Law states that they meet the terms used in the Financial Instruments Market Law. This means that the corresponding law of the Republic of Latvia must be referred to for understanding the essence of those terms.

The authors also conclude that the regulatory framework of the Republic of Latvia still does not include the following, very critical definitions of accounting terms: *goodwill* and *stocks*, as well as does not define the following terms like *derivatives* and *equity shares*. The authors believe that the definitions thereof should be included in the Annual Accounts and the Consolidated Annual Accounts Law.

Book-keeping and the annual reporting are significantly burdened by the fact that explanations of certain terms must be searched for in other laws and regulations of the Republic of Latvia, in the terms of which use of such terms may even be different. For instance:

- *Concession* – A definition of concession agreement is provided in the Latvian Law On Public-Private Partnership of 18 June 2009, but concession as such is not defined (Law On Public-Private Partnership, 2009);
- *Patent* – The Latvian Patent Law of 15 Feb 2007 clarifies the application of the term, but the term itself is not defined (Patent Law, 2007);
- *License* – The Latvian Copyright Law of 6 Apr 2000 defines a license agreement (Copyright Law, 2000). A license is required for individual types of business and several Cabinet Regulations stipulate those requirements;
- *Trade mark* and *service mark* are defined in the Law “On Trade Marks and Indications of Geographical Origin” of 16 June 1999 (Law On Trade Marks and Geographical Indications of Origin, 1999);
- *Bill of exchange* is defined in the Bill of Exchange Law of 27 Sep 1938 (Bill of Exchange Law, 1938).

The authors propose to assess the accounting terms defined in other laws and regulations and include explanations of those terms in the Annual Accounts and the Consolidated Annual Accounts Law. The authors appreciate the requirements included in new Cabinet Regulations No. 775 “Annual Accounts and Consolidated Annual Accounts Law Application Rules” adopted based on the Annual Accounts and the Consolidated Annual Accounts Law, which were not included in the pre-existing Cabinet Regulations and which explain the accounting requirements of the following items:

- Methods and procedures for accounting and evaluating working or food-producing animals or plants,
- Indication of intangible property in the financial statements discrepant to classification criteria of research and development activities and publicly created intangible investment,
- Methods and procedures for accounting and valuation of stocks in order to indicate the costs involved and the value changes in the financial statements,
- Procedure for valuation and indication of financial lease and operating lease transactions in the financial statements (Annual Accounts and Consolidated Annual Accounts Law Application Rules, 2015).

The authors draw attention to the fact that the new Annual Accounts and the Consolidated Annual Accounts Law intends to depart from the requirements of the Law in certain cases and indicate certain items in the financial statements by using other laws and regulations or international accounting standards. Such items include, inter alia, *investment property*, *biological assets*, *long-term investments held for sale*, *deferred tax assets*, and *deferred tax liabilities*. Regarding items: *investment property*, *biological assets*, and *long-term investments held for sale*, the new regulatory framework states that the Latvian companies will now be able to choose whether companies “intend to recognize, evaluate, indicate them in the financial statement and to provide explanatory information about them in accordance with international accounting standards” when starting to apply the Law or they shall reclassify the aforesaid assets as follows:

- Investment properties into fixed assets,

- Biological assets into fixed assets and indicate in sub-item “Working or food-producing animals and perennial plants” of the balance sheet item “Animals and plants” or the annual plantings and crops as well as the animals that the company intends to classify henceforth as stocks in the structure of biological assets,
- Long-term investments held for sale are reclassified back to the corresponding items of fixed assets or intangible assets or reclassified as stocks (Annual Accounts and Consolidated Annual Accounts Law Application Rules. 2015).

The issue of *deferred tax* is unclear. Since 24 June 2005, when the amendments to the Law took effect, the definitions of deferred tax assets and deferred tax liabilities, and requirements regarding their reporting in financial statements were included in the Corporate Annual Accounts Law of the Republic of Latvia (The title of the Law was changed to the Annual Accounts Law in 2006, which was in force until 2016). In practice, many Latvian companies already calculated deferred tax assets and deferred tax liabilities and reported the same in their financial statements since mid-1990s. Now the new Law does not clearly specify the cases, when companies must report deferred tax in their financial statements. It is only mentioned that “due to justified reasons (for example, if a company whose transferable securities are admitted on a regulated market, itself is a parent company and prepares consolidated annual account in accordance with international accounting standards, etc.) the company recognizes, evaluates, and indicates deferred tax assets and deferred tax liabilities as well as previously mentioned items like *investment property*, *biological assets*, *long-term investments held for sale* or other assets or liabilities of the balance sheet in the financial statement in accordance with international accounting standards (Annual Accounts and the Consolidated Annual Accounts Law, 2015).

By excluding the above deferred tax assets or deferred tax liabilities in the corporate financial statements and by using options in relation to *investment property*, *biological assets*, *long-term investments held for sale*, there will be significant differences in the financial statements, thus the authors emphasize that it must be taken into account definitely when comparing and analysis the information provided therein. Since the new regulatory framework does not define precisely, which items must be valued in accordance with international accounting standards, the authors consider that it must be stipulated precisely in the Annual Accounts and the Consolidated Annual Accounts Law.

### 3. STRUCTURE OF ANNUAL ACCOUNTS OF LATVIAN COMPANIES AND ITS ASSESSMENT

Structure of corporate annual accounts is defined similarly in the pre-existing and new regulatory framework of the Republic of Latvia, and it is provided therein that the annual account as a whole consist of a financial statement and a management statement. Financial statement is defined differently, because the Annual Accounts Law stipulated that “the financial statement as a whole consists of a balance sheet, profit and loss account, cash flow account, statement of changes in equity, and annexes” (Annual Accounts Law, 1992), while pursuant to the new regulatory framework structure of financial statement depends on a category of a company. Categories of enterprises in the Annual Accounts and the Consolidated Annual Accounts Law are in line with the thresholds defined in the Directive 2013/34/EU of the European Parliament and of the European Council of 26 June 2013 (Directive 2013/34/EU, 2013). Summing up the requirements and applicable reliefs set forth in the new Law, the authors drew up Table 1, by indicating the categories of companies and structure of their annual account.



*Table 1: Structure of annual accounts of Latvian companies pursuant to the Annual Accounts and the Consolidated Annual Accounts Law (Annual Accounts and the Consolidated Annual Accounts Law, 2015)*

<b>Category of company</b>	<b>Thresholds in the Annual Accounts and the Consolidated Annual Accounts Law</b>	<b>Structure of annual account</b>
Micro enterprise	which does not exceed two of the following thresholds: 1) Grand total of balance sheet – 50,000 euro; 2) Net sales – 100,000 euro; 3) Average number of employees in the reported year – 5.	Balance sheet Profit and loss account
Micro enterprise	which does not exceed at least two of the following thresholds: 1) Grand total of balance sheet – 350,000 euro; 2) Net sales – 700,000 euro; 3) Average number of employees in the reported year – 10.	Balance sheet Profit and loss account Financial statement annex
Small enterprise	which does not exceed at least two of the following thresholds as of the balance sheet date: 1) Grand total of balance sheet – 4,000,000 euro; 2) Net sales – 8,000,000 euro; 3) Average number of employees in the reported year – 50.	Management statement Balance sheet Profit and loss account Financial statement annex
Medium-sized enterprise	which is not a small enterprise and does not exceed at least two of the following thresholds as of the balance sheet date: 1) Grand total of balance sheet – 20,000,000 euro; 2) Net sales – 40,000,000 euro; 3) Average number of employees in the reported year – 250.	Management statement Balance sheet Profit and loss account Cash flow account Statement of changes in equity Financial statement annex
Large enterprise	which exceeds two of the three criteria as of the balance sheet date: 1) Grand total of balance sheet – 20,000,000 euro; 2) Net sales – 40,000,000 euro; 3) Average number of employees in the reported year – 250.	Management statement Balance sheet Profit and loss account Cash flow account Statement of changes in equity Financial statement annex

In the Republic of Latvia, a financial statement will include all five accounts for only medium-sized and large enterprises. It should be noted that Latvian companies, which did not exceed two of the following criteria as of the balance sheet date, had the opportunity not to draft a management statement, cash flow account and statement of changes in equity before:

- 1) Grand total of the balance sheet – 400,000 euro;
- 2) Net sales – 800,000 euro;
- 3) Average number of employees in the reported year - 25 (Annual Accounts Law, 1992).

When comparing thresholds of enterprises, which shall be required to draft cash flow account and statement of changes in equity as well further on, the authors point out that the grand total of the balance sheet and net sales now are set tenfold higher whereas a number of employees is set twofold higher. This means that significantly fewer companies shall include cash flow account and statement of changes in equity in the financial statement further on. One can conclude based on the latter that administrative burden for small enterprises will be reduced as provided for in the Directive 2013/34/EU.

The new Latvian regulatory framework requires the use of only one scheme for drafting the balance sheet as before. For drafting a profit and loss account, companies will be able to choose one of the two vertical format schemes from now on: classified as per function or type of expenditure, in contrast to the previously applied four schemes. The new Latvian regulatory framework just like Directive 2013/34/EU does not provide using vertical format schemes for drafting profit and loss account anymore.

One scheme is provided for drafting statement of changes in equity, but cash flow account can be prepared by choosing one of the two schemes, preparing the latter by means of direct method or indirect method. When direct method is applied, information about cash flows can be obtained directly from the records data of the company accounting, by analysing cash and non-cash operations or by adjusting the items of profit and loss account. There are two options for drafting cash flow account by direct method, which are known as “true” direct method and “semi-direct” method respectively (Stolowy, Lebas, Ding, 2013, p. 504). Evaluating the drafting requirements for financial statements set forth in the Annual Accounts and the Consolidated Annual Accounts Law, the authors believe that it is not explained enough in detail how cash flow account should be drafted. The Law includes only general requirements, but it does not specify which corrections, for example, should be carried out in relation to the items of profit and loss account if the cash flow account is prepared according to the direct method, by using the second option or if it is prepared according to the indirect method. The authors propose to supplement the Annual Accounts and the Consolidated Annual Accounts Law by including detailed requirements with regard to drafting of cash flow account.

#### **4. CHANGES IN REQUIREMENTS ON AUDITING (INSPECTING) ANNUAL ACCOUNTS**

The authors compared auditing of the annual account in the pre-existing Annual Accounts Law, the new Annual Accounts and the Consolidated Annual Accounts Law, and the Directive 2013/34/EU and they pointed out that conditions of auditing to be divided into four categories will refer to the Latvian enterprises since 2016 (See Table 2).

Pursuant to four categories of company sizes defined in the EU Directive 2013/34/EU, for three of them - large, medium-sized, and micro enterprises – the conditions of auditing will remain at the same level. This means that large and medium-sized enterprises will require the mandatory annual account audited by a certified auditor or an auditing company henceforth as well in accordance with the Law “On Sworn Auditors”, whereas the annual account of micro enterprises is not subject to audit. The main differences are expected in the group of small enterprises. Despite the fact that par. 43 of the preamble of the Directive 2013/34/EU indicates that the duty to carry out an audit should not be applied to small enterprises, provisions of Section 91 and 92, chapter XV of the Annual Accounts and the Consolidated Annual Accounts Law of the Republic of Latvia used an option provided for in the Directive to set higher requirements under national law. Thus, small enterprises are divided into two groups. The first group is the group, whose annual accounts shall be subject to auditing when certain criteria are exceeded (See Table 2), and the second group, whose annual accounts shall be subject to a limited review by a sworn auditor.

Table 2: Comparison of the requirements on auditing (inspecting) annual accounts  
(Annual Accounts Law, 1992; Annual Accounts and the Consolidated Annual Accounts Law, 2015; Directive 2013/34/EU)

Category of company	Annual Accounts Law	Annual Accounts and Consolidated Annual Accounts Law	Directive 2013/34/EU
<b>Large and medium- sized Enterprises/</b> , whose transferable securities are admitted on a regulated market	Annual accounts are audited by a certified auditor if: 1) exceeds two of the three criteria: • Balance sheet 400,000 euro, • Net sales 800,000 euro, • Average number of employees 25.	Annual accounts are audited by a certified auditor or an auditing company in accordance with the Law "On Sworn Auditors"	Financial statements are audited by one or more sworn auditors or auditing companies.
<b>Small Enterprises</b>	Annual accounts are audited by a certified auditor if: 1) exceeds two of the three criteria: • Balance sheet 400,000 euro, • Net sales 800,000 euro, • Average number of employees 25.	Annual accounts are audited by a certified auditor if: 1) exceeds two of the three criteria: • Balance 800,000 euro, • Net sales 1.6 million euro, • Average number of employees 50. 2) is a company of a public person, 3) Certain items are valued in accordance with IFRS.	The duty of auditing should not be applied to financial statements of small enterprises
<b>Small Enterprises</b>	Annual accounts are audited by a certified auditor if: 1) exceeds two of the three criteria: • Balance sheet 400,000 euro, • Net sales 800,000 euro, • Average number of employees 25.	Limited auditing of the financial statement is carried out by a sworn auditor if: 1) Requirement on auditing does not apply, 2) Exceeds two of the three criteria; • Balance sheet 400,000 euro, • Net sales 800,000 euro, • Average number of employees 25.	The duty of auditing should not be applied to financial statements of small enterprises.
<b>Micro Enterprises</b>	Annual account is not subject to auditing	Annual account is not subject to auditing or limited review.	The duty of auditing should not be applied to financial statements of small enterprises.

Although a limited review of annual accounts became topical in Latvia only after adoption of the Annual Accounts and Consolidated Annual Accounts Law, this method is not new. Publications by several authors on this topic are already found in scientific literature in the 80-ies. For example, Meddaugh, E. James "...present arguments for adopting the procedures of the limited review for all reports on unaudited financial statements in the U.S." (Meddaugh, E. James, 1977), but American Institute of Certified Public Accountants published an official release of the ethical issues of auditing already in 1976, including with regard to limited review by stating that "A limited review may bring to the accountant's attention significant matters affecting the interim financial information, but it does not provide assurance that accountant will become aware of all significant matters which would be disclosed by an audit." (AICPA, 1976).

So the new wording of the Law includes so far unpractised method in Latvia in addition to the pre-existing annual account auditing, that is, a limited review. Since reasonable assurance engagement is drafted during the audit, whereas limited assurance engagement is drafted during the review, it is important to explain the difference between the two types of above-mentioned assurance in order to avoid possible misunderstandings and distrust of financial statement users to unusual assessment of the financial statement. Currently, only about 3.3% of all enterprises incorporated in Latvia are subject to auditing of sworn auditors totalling to approximately 7,000 enterprises (Kīrsons, 2015). By raising the thresholds pursuant to the provisions of the Directive, their number will significantly increase, but the question remains at the same time whether contracting partners of those enterprises and the public as well will be able to rely on such annual accounts. President of Latvian Accountants' Association Andrejs Ponomarjovs indicates that presence of auditors would be even more required in a situation where the level of shadow economy is still high in Latvia. (Kīrsons, 2015)

According to the International Framework for Assurance Engagements prepared by the IFAC (IFAC, 2008), the objective of a limited assurance engagement is a reduction in assurance engagement risk to a level that is acceptable in the circumstances of the engagement but where that risk is greater than for a reasonable assurance engagement, as the basis for a negative form of expression of the practitioner's conclusion. To compare, a goal of reasonable assurance engagement is a reduction in assurance engagement risk to an acceptably low level in the circumstances of the engagement, as the basis for a positive form of expression of the practitioner's conclusion. Kerry Hicks (Financial Conduct Authority of UK) states that the differences between the audit and review mainly are associated with: 1) level of assurance; 2) procedures applied; 3) type of report provided (Hicks, 2013).

It results from the IFAC definitions that assurance of the users of financial statements after a limited review on veracity of financial information has a higher degree of risk than in the event of an audit, but it is determined by a range of procedures used for collecting evidence. In this case, emphasis is laid on the acquisition of knowledge about the company's environment, employee interviews, analytical procedures, and assessment of adequacy and conformity of evidence gathered. Such procedures as significant incompliance risk assessment, control tests, detailed reviews, and other are not used here. In its turn, the audit report has a positive statement, for example, "... the financial statements give a true and fair view of ..." as opposed to a negative statement of a limited review, "... no facts have come to the attention, which would make one consider that the financial statements do not give a true and fair view of..."

There are different views with regard to usefulness of limited reviews in various social groups. Sceptical position of entrepreneurs can be opposed to the views of regulatory bodies. According to a study carried out by the Latvian Association of Certified Auditors, a limited review as an efficient, but more convenient format for small enterprises proved itself in Estonia, where it has existed for several years already.

When assessing the new annual accounts auditing regulation in Latvia in general, the authors point out that the new Law respects the requirements for reducing administrative burden for small enterprises laid down in the Directive, but a number of audited annual accounts of the companies will decrease significantly. That might significantly affect the level of quality of financial statements and conformity of the decisions made by the users thereof to reality. The authors also emphasize that if companies choose to assess some items of financial statement according to international accounting standards, then a sworn auditor must review (audit) annual account of such company. As the companies have the choice with regard to these items, the authors have an unanswered question whether the companies, which do not require audit by a sworn auditor under the regulatory framework, will not use an opportunity to hide these items in accordance with international accounting standards, thus avoiding auditing of their annual accounts. The challenge might be partially overcome by a proposal of the authors to refine the fifth part, Section 13 of the new Law by defining the cases when certain items of the annual accounts of small enterprises shall be drafted in accordance with IFRS terms and thus auditing of annual account is mandatory. The authors believe that it would exclude opportunities for manipulating with item evaluation in order to avoid auditing of the annual account.

## 5. CONCLUSIONS AND SOLUTIONS

Summarizing the research carried out, the authors conclude that the requirements regarding drafting of an annual account will significantly change in the Republic of Latvia, which shall be applied starting from 2016. Definitions of accounting terms are supplemented and adjusted, but not all the major items to be used in the annual account are defined yet. The requirements in relation to structure of the annual account are corrected, thus small enterprises shall not draft a cash flow account and a statement of changes in equity. The requirements regarding audits of corporate annual accounts are changed resulting in the requirements on auditing of annual accounts of small enterprises corresponding to certain criteria will change much by also providing application of a limited review not yet applied in Latvia. Therefore, Latvia has complied with the principle of reducing administrative burden for small enterprises laid down in the Directive 2013/34/EU, but it may adversely affect overall level of quality of the financial statements in some cases.

Thus, the authors propose to introduce the following amendments to the Annual Accounts and the Consolidated Annual Accounts Law in order to ensure adequate quality of the annual accounts:

- To define and include the following terms into the Law: *goodwill*, *stocks*, *derivatives*, and *equity shares*;
- To assess definitions of the following accounting terms set forth in other laws and regulations: *concession*, *patent*, *license*, *trade mark*, and *bill of exchange*, and to include them into the Annual Accounts and the Consolidated Accounts Law to be included in the "Annual report and consolidated annual report of the Law";
- To specify explicitly when enterprises must calculate and report deferred tax assets and deferred tax liabilities in the financial statements and in which cases the enterprises must report other items in accordance with international accounting standards, thus clarifying when auditing of the annual accounts of small enterprises is mandatory;
- To include detailed requirements in relation to drafting of a cash flow account.

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## IMPACT OF CRM SYSTEMS ON THE PERFORMANCE OF ENTREPRENEURIAL ENTITIES IN CROATIA

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### ABSTRACT

*Information and communication technology is an important foundation for gaining sustainable competitive advantage of entrepreneurial subjects in the global competitive environment in which the priority is identifying, tracking and compliance with customer's needs and requirements. For this reason, the research studies the impact of the Customer Relationship Management – CRM system on the performance of business entities in the Republic of Croatia. The aim of the research is to determine the efficiency of CRM according to the criteria of customer loyalty, innovation capacity and sales revenue. In order to prove or disprove the hypothesis of the positive impact of CRM on the performance of business entities in the Republic of Croatia, various scientific methods were used; analysis, synthesis, description and comparison, and primary data collected by surveying 50 business entities in the Republic of Croatia that apply the CRM system. The research results indicate that the CRM system plays an important role in successfully meeting the needs of customers, gaining loyalty and in raising overall profitability of business entities that apply CRM. The results suggest the need for systematic education of SMEs about the benefits of CRM systems. CRM as one of the key factors for the survival of the company is becoming the focus of the business on which it is necessary to know as much as possible. The economic crisis only further increases the need for implementation of information and communication technologies in business in terms of optimization and streamlining of business processes in a way that the use of such technology leads to a regulated customer base, defined business activities and the handling of customers and provide an insight into the broader picture of business on the basis that the employer will be able to more effectively make decisions based on the weaknesses and strengths of its operating system.*

**Keywords:** CRM, customer loyalty, business entities in Croatia

### 1. INTRODUCTION

The research topic is the impact of CRM systems on the performance of business entities in the Republic of Croatia. The goal of the research is to determine the efficiency of CRM according to the criteria of customer loyalty, innovation capacity and sales revenue. The paper consists of five sections. After the introduction of the topic, the concept of customer relationship management is presented and explained. Third part of the paper presents the subject and

research methodology. Results and discussion are the subject of the fourth chapter and the main results and conclusions of the research were synthesized in the concluding chapter.

## **2. CUSTOMER RELATIONSHIP MANAGEMENT IN A BUSINESS**

Customer relationship management is becoming an increasingly important aspect of a successful business of entrepreneurial subjects, which is conditioned by the fact that the supply of products and services in the global market is far higher than demand (Godin, 2005, Kotler and sur., 2001). In a highly competitive global environment, bargaining power of buyers and the possibility of choice is growing and thus long-term business success of entrepreneurial entities is fully dependent on the ability to adapt to the needs and requirements of customers. The small and medium enterprises have a significant advantage in this aspect compared to large enterprises as they have the flexibility and adaptability (Sikavica, 1999, Scalera and Uruci, 2011, Tomljenović, Dujanić, 2009), which is a necessary prerequisite to adapt to the changing characteristics of market demand.

Despite the fact that small and medium-sized enterprises (*SME - small and medium enterprises*) have exceptional potential in the successful development of relations with customers, those companies often do not have the adequate resources to implement complex and capital-intensive market research. As Javez and sur. Point out (2011), SMEs often plan future development using assumptions about trends in the market which can potentially result in failure of SMEs in the early stages of the life cycle of the company. For this reason, it is crucial that the SMEs that operate with a large number of customers in the B2B and / or B2C market implement customer relationship management by introducing the CRM system as the technology platform that insures factual decision making based on accurate data and information about customers.

The development of relations with the clients has its origin in the theory of consumer behavior that studies the *"behavior of market players, ie the consumers on the market, where they are trying to maximize their satisfaction when choosing between two or more various goods and services"* (Gutić, Barbir, 2009). Customer relationship management in entrepreneurship is in fact application of strategies, practices and technologies for the analysis of interactions with customers and collecting data on customers throughout the life cycle of products and services, which supports the process of customer retention and continued growth in sales (Shamsuddoha, Alamgir, 2010, Javez and sur. 2011). Although the CRM system as the technology platform of successful management of customer relationship greatly streamlines the collection of data on customers, the effective customer relationship management is not conceivable without the organizational culture centered on the needs and requirements of customers (Zablah and sur., 2004.)

## **3. THE PROBLEM AND RESEARCH METHODOLOGY**

The authors in the area of marketing theory and consumer behavior theory are unanimous in the view that the success of the performance of enterprises depends on recognizing and meeting the needs and requirements of customers. "Customer-centric" approach to business is necessitated by the dynamic and turbulent environment and growth in possible customer choices. Customer relationship management today is greatly streamlined by technological tools such as CRM systems that enable automatic collection and processing of customer information



and create reports on the habits of certain groups of customers and help identify the most profitable customer groups that are of great importance for businesses. Customer relationship management improves the level of customer loyalty, innovation ability of enterprises and income from the sale of businesses (Wang and sur. 2004, Chang and sur. 2005).

Consequently, empirical research proves or disproves the positive impact of CRM on the performance of business entities in the Republic of Croatia with using the criteria of customer loyalty, innovation capacity and sales revenue before and after the introduction of the CRM system. The study was conducted on a sample of 50 owners and / or managers of business entities in Croatia that use CRM systems. The sample was represented by 30 owners and / or managers of medium-sized business entities and 20 owners and / or managers of small business entities. The survey was conducted via the Internet, and the task of respondents was to express attitude to the above attributes of doing business before and after the introduction of CRM, on a scale from 1 to 3 where 1 - not satisfied, 2 – partly satisfied and 3 - fully satisfied.

In the first three survey questions, the respondents expressed their attitude to the performance of the company prior to the introduction of CRM, specifically to customer loyalty, innovative capacity and sales. In the next three survey questions, respondents rated the same criteria, but in the period after the introduction of the CRM system. Based on the comparison of each criterion, the hypothesis of a positive CRM impact is proven or disproven. In the last survey question, respondents rated the attributes of the CRM system in improving their core business on a scale of 1 - poor to 5 - excellent.

#### 4. RESULTS AND DISCUSSION

Table 1. shows the average performance rating of companies before and after the introduction of the CRM system.

*Table 1. Average score of business performance before and after the implementation of CRM system*

<b>Criteria</b>	<b>Before implementation of CRM</b>	<b>After implementation of CRM</b>	<b>Change</b>
Customer loyalty	1,90	2,80	0,90
Innovation capacity	1,50	2,10	0,60
Sales revenue	1,80	2,90	1,10
<b>Average</b>	<b>1,73</b>	<b>2,60</b>	<b>0,87</b>

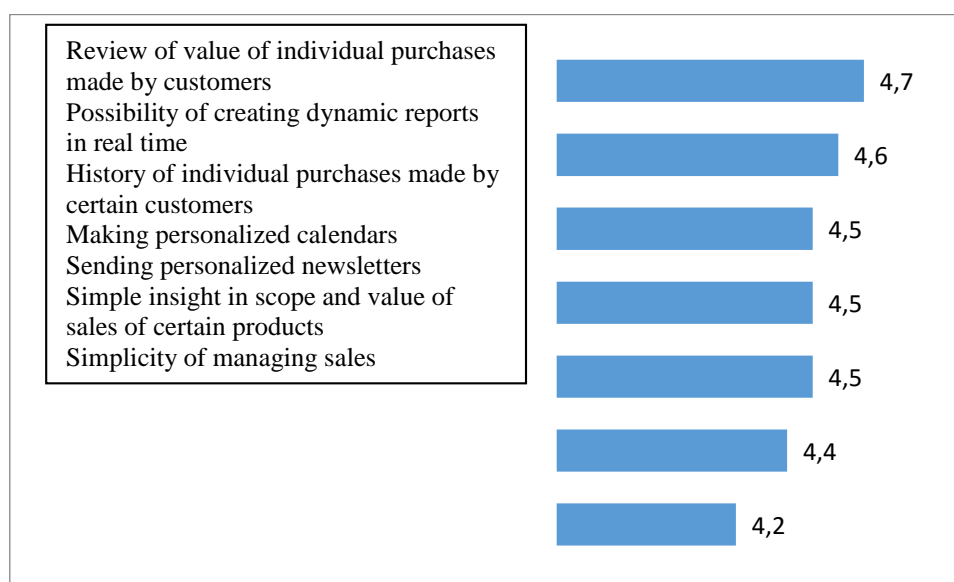
Source: Author's research

Based on Table 1, we conclude that the introduction of CRM systems improved business performance of business entities in the Republic of Croatia in all the criteria, such as customer loyalty, innovation capacity and sales revenue. While in the period before the introduction of

the CRM system average grade performance of the businesses was 1.73 and the period after the introduction marks the increase in average ratings performance at 2.60 out of possible 3.00. The benefits of the application of CRM systems are most apparent in the improvement of financial parameters of the business (sales revenue), and least noticeable in terms of increasing innovation capacity, which is the foundation of a long-term competitive advantage and therefore entrepreneurs need to use CRM data more systematically us to innovate products and services, pricing policy, sales and promotions. The results prove the hypothesis of the paper that CRM systems have a positive impact on the performance of business enterprises, in terms of increasing customer loyalty, innovation capacity and increase sales revenue.

Graph 1 shows the individual attributes of CRM systems that respondents considered most useful in their own business.

*Graph 1. The usefulness of individual CRM attributes according to respondents*



Source: Author's research

Based on the data in Graph 1, we conclude that the respondents evaluated the attributes of a CRM system as extremely useful, especially the review of the value of the purchase, or the ability to identify the most profitable customer groups, the ability to create dynamic reports to customers in real time and the possibility of personalized communication with customers (calendars, newsletters and similar.). These results further prove the hypothesis of a positive impact on the CRM system performance on business entities in the Republic of Croatia.

## 5. CONCLUSION

The modern market is characterized by an exceptional supremacy of customers and the need of manufacturers to adapt as much as possible to the specificities of certain market segments. Information-communication technology has enabled efficient monitoring of the needs and habits of individual customers and streamlined the process of collecting data on customers and has made possible communication in a personalized manner to increase trust and loyalty toward providers of products and services. CRM system is a technological platform which

systematically and effectively supports consumer centric orientation of modern business organizations. Results confirmed the positive impact of CRM on the performance of business entities in the Republic of Croatia, in terms of customer loyalty, improved innovation capabilities and increase in sales revenue. The study was conducted with significant limitations. The number of business entities that use the CRM system in the Republic of Croatia is still extremely low, indicating a lack of awareness regarding the capabilities of CRM systems by Croatian entrepreneurs. These conditions indicate the need for systematic training of entrepreneurs on the possibilities of improving operations through information-communication technologies. Another limitation arose from the lack of information on how long the particular business entity uses the CRM system, making it impossible to fully correlate between the period of CRM use and its impact on improving business performance of business entities in the Republic of Croatia. The investigation of the correlation between these two factors is recommended as the subject of further empirical research.

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