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Economic and Social Development

57th International Scientific Conference on Economic and Social Development Development

Book of Proceedings

Editors:

Aleksandra Grobelna, Marin Beros, Hrvoje Volarevic



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Venelin Terziev

THE POLICY OF THE LABOUR MARKET IN BULGARIA IN THE FACE OF CHALLENGES AFTER THE PANDEMIC SITUATION CAUSED BY COVID-19

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ABSTRACT

This work makes a research and analyses the periods of crisis situation on the labour market in Bulgaria in the newest history of our country. A parallel is made with the measures, which were taken in the period of active economic and political transformation at the end of the nineties of the past century and the transition to market economy and the current crisis situation caused by the pandemic COVID-19 state of affairs. The prospects for action are analysed as well as the post-crisis measures and an attempt to forecast the future action is made.

Keywords: Social system, COVID 19, Pandemic, Labour market, Policy

1. INTRODUCTION

The condition of the labour market in Bulgaria has been directly influenced by the ongoing political processes for the past decades. Indisputably, significant changes on it were made in the period of transition from state planned to market economy. This process in the nineties of the past century went together with significant fluctuations and available crisis situations in a number of regions and provinces of the country. The shutdown of plenty of factories or change in their main business activity, privatization processes as well as such related to the workforce mobility, faced the country and in particular the labour market with specific challenges. This period of our newest history is characterized by the formation of new legislation in the field of unemployment and occupation as well as the formation of big groups of unemployed people from different vulnerable groups. These circumstances make necessary the formation and implementation of a qualitatively new and different social policy from the one, which has been pursued to this moment. This period of development is also accompanied with the frequent changes of Bulgarian governments, even to a few snap parliamentary elections. This determines thorough reconsideration and structuring of a set of actions, which should 'calm down' the situation and partially to satisfy the needs of people left without jobs. A relatively big group of long-term unemployed people is formed and such people, who entirely rely on the social system. In different stages of this development this group of unemployed people has made 1/3 of the total number of registered unemployed persons at the public employment services.

2. THE POLICY OF THE LABOUR MARKET IN BULGARIA IN THE FACE OF CHALLENGES AFTER THE PANDEMIC SITUATION CAUSED BY COVID-19

The pragmatism of the policies pursued leads to the implementation of mass programs of temporary employment that in winter period should provide subsistence to the people, especially those of them in the affected regions. Such an element of state funded employment social policy was carried out until 2009. Different and various forms were applied. The authors of these programs tried to dress these projects in the sense of publicly useful for the local communities and were related rather to the sanitation of populated places, security, landscaping, painting buildings and facilities, etc. This action plan implementation approach in the field of employment and occupation is always up-to-date where there are mass layoffs, big groups of unemployed persons from the risk groups or in regions where the industrial factories completely suspend their business activity.

The north-western region fell in a very difficult situation, which up to these days can't recover, regardless of the different programs, measures and project, which have been implemented so far. The Bulgarian economy development from 2000 to 2014 can be conditionally divided in two subperiods – until 2008 and from 2009 to 2014. The first subperiod is characterized by economic expansion – quick increase of the GDP, employment and income, but at the same time with the accumulation of significant imbalances (increasing inflation, deepening current accounts deficit, over investment in some industries, etc.). The second subperiod corresponds to the onset of economic recession in the country, which lasted until 2014 – the year in which the level of real GDP from 2008 was reached. The labour market in Bulgaria from 2000 to 2014 also developed, divided in two periods:

- The first period stretched from 2000 to 2008, when the employment in the country increased and unemployment decreased. The second period was from 2009 to 2014, when opposite trends were observed – employment fell and the number and level of unemployed people increased;
- In the period 2000–2001 the number of employed people decreased, reflecting the influence of the massive economic restructuring from 1998 to 2000. After 2002 the negative effect of privatization process upon the dynamics of employment began its fall and in the period until 2008 the number of employed people increased supported by quick economy development. With the economy crisis onset in 2009 began a period of fall in the number of employed people, which lasted until 2013 and only in 2014 first signs of labour market recovery were observed.

The increased labour demand in the period 2002–2008 and especially in the years just before the economic crisis of 2009 was mostly expressed in construction and the business activities related to it as this industry was mostly affected by the reduction of capital flows and the limited bank lending after the crisis onset. In 2014 construction remained one of the few industries where the number of employed people marked a decrease. After a period of continuous fall, in 2014 the number of employed people in industry and services gradually became stable. In the period 2000–2014 the real labour productivity in the Bulgarian economy was characterized by constant increase. Difference was observed in the factors causing growth of indicators in the period of economic boom until 2008, in the period of crisis and after 2009 stabilization. In the first period the growth of productivity was mainly related to the increase of the economy added value, while in the second period it was caused rather by the decrease of the number of employed people. For the whole period in question, the rate of increase of labour productivity was higher than the EU average. After the unemployment reached one of the highest levels before 2001, in the period until 2008 a trend of reduction was observed. From 2002 to 2005 the unemployment development was affected to a high degree by the implementation of intense employment policy and especially the beginning of national program 'From social benefits to providing employment' at the end of 2002 and the beginning of 2003. Labour demand on the primary labour market was the main factor influencing the positive development from 2006 to 2008, and the decrease of employment after 2009 caused the growth of the indicator in post crisis years. Only in 2014 the unemployment coefficient fell, which was mainly caused by the increase of country employment. In the years after the crisis onset there was indication of poor efficiency of the labour market functioning and existing structural problems. With the highest level of unemployment are the young people who are one of the groups most badly affected by the crisis on the labour market. The level of youth unemployment in Bulgaria significantly exceeds the average level of the EU countries. Unemployment level remains high in the group of adult men and 55 – 64 -year old women (Table 1).

Table 1: Main labour market indicators

Main labour market indicators											
2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	3,2019	3,2020
Unemployed people according to the Employment Agency											
Unemployed people registered at employment offices (number)											
350944	332601	364537	371380	366470	330816	284707	236752	202994	185266	194603	220072
Level of registered unemployment (%)											
9.5	10.1	11.1	11.3	11.2	10.1	8.7	7.2	6.2	5.6	5.9	6.7
Registered young people up to 24 (number)											
30168	29797	35839	35286	28745	21578	14736	12920	10023	9231	9778	11367
Registered young people up to 29 (number)											
63500	663690	74779	74720	64122	51680	37998	33600	26785	23998	25698	27947
Unemployed people with registration at employment office longer than 1 year (number)											
110848	118135	118832	122738	138473	146010	118278	87706	65074	47871	50797	45869
Unemployed people according to the National Social Security Institute											
Registered unemployed people with a right for unemployment benefits (number)											
136755	106580	117688	116525	100806	90192	87837	79207	72743	62921	74431	89168
Unemployment according to Eurostat *											
Average EU-28 unemployment level (EU-27 dated 2020) (%)											
9.6	9.7	10.5	10.9	10.2	9.4	8.6	7.6	6.8	6.3	6.9	6.5
Unemployment level in Bulgaria (%)											
10.2	11.3	12.3	13	11.4	9.2	7.6	6.2	5.2	4.2	4.7	4.1
Youth unemployment level (15-24 y.o.a.) EU-28 average (EU-27 dated 2020) (%)											
21.4	21.8	23.3	23.8	22.2	20.4	18.7	16.8	15.2	14.4	15.5	14.9
Youth unemployment level (15-24 y.o.a.) in Bulgaria (%)											
21.9	25	28.1	28.4	23.8	21.6	17.2	12.9	12.7	8.9	9.8	10.3

Source: *The data is seasonally corrected

In the period after 2009 the unemployment coefficient of the group of men goes up faster than the one of women because in the worst affected industries most of the employed people are men. Since 2009 the unemployment coefficient of the people with primary and lower than primary education level has started going higher and even at faster rate than those of the groups of people with secondary and higher education levels. The layoff of mainly low-qualified workers and the ongoing structural changes in the economy are the main reason for the increase of the number, share and coefficient of the long-term unemployed people in the period 2010–2013 (Table 2).

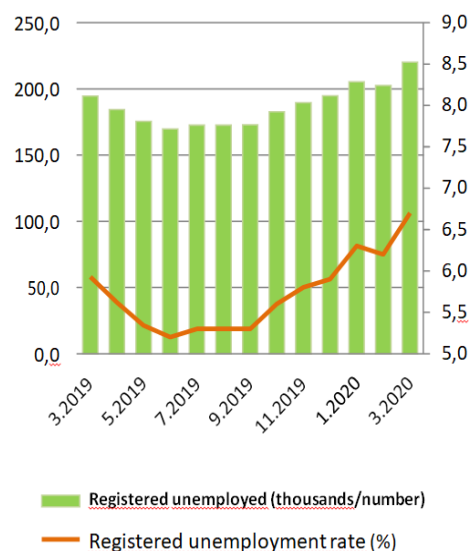
Table following on the next page

Table 2: Profile of people included in the vulnerable groups on the labour market

Vulnerable group on the labour market	Main characteristics and estimated risk of poverty
Unemployed middle-aged people (23%)	Long-term unemployed people (50%)
	Age group 35-54 (66%)
	Completed secondary education (67%)
	High risk of poverty
Pensioners, women (19%)	Age group 35-54 (86%)
	Low risk of poverty
Nonworking young mothers (15%)	Inactive (67%), unemployed people (33%)
	Age group 16-34 (75%)
	High risk of poverty
NEET, men (15%)	Long-term unemployed people (43%)
	Age group 16-34 (96%)
	Without professional experience (61%)
	High risk of poverty
Pensioners, early retirement, men (13%)	Age group 55-64 (73%)
	Low risk of poverty
Long-term unemployed people with low education level (12%)	Long-term unemployed people (61%)
	Age group 25-54 (69%)
	Incomplete secondary education (82%)
	Very high risk of poverty
Low education level people, early retired people and people with disabilities (3%)	Pensioners (50%), people with permanent disabilities (40%)
	Age group 25-59 (89%)
	Without completed secondary education (40%)
	Moderate risk of poverty

Source: National Employment Agency

After the economic recovery, which followed the financial and economic crisis of 2008, well felt in 2009, a new crisis period began (Figure 1).

Figure 1: Registered unemployment

The unusual preconditions for its cause are the pandemic situation and the declared state of emergency in the country. This caused a quick collapse in some industries and uncertainty, as well as quickly changing indicators, characterizing the local and the national labour markets.

In the first month of the declared state of emergency, because of the pandemic situation, the labour market stays in a relative balance. Unfortunately, the ongoing processes have such a speed that the reaction of those who should take adequate and competent measures does not allow situation analysis. This calls for quick and not so objective decisions, because the situation is so dynamic that the public expectations are high and can't wait for the usual way to take decisions in this direction. The typically created mechanism of program target approach with a range of project proposals from the local communities, practically will not work at least because it needs a longer period for preparation of the relative project proposals, their evaluation and subsequent funding. The financial and program reserve set out in the National Employment Action Plan for 2020 cannot meet not only the expectations that have been created, but also the real crisis situation. The approaches in this crisis situation are usually two. The first is to apply and use measures of passive nature as the crisis situation is expected to pass quickly and the economy to recover itself quickly enough. This is a range of social benefits and compensations of objective nature, which are intended for the risk groups that have been formed. This mode of action has its relatively positive sides, bearing in mind that it directly influences every household and provides an element of social security in the critical period. However, it can't impact the business subjects which are in quite a difficult situation. It should be searched for the creation of mechanism that can directly help them, but it should be as fair as possible. A part of the measures, which the government takes, is to cover a part of the salaries and social security contributions of the most badly affected companies. This looks very easily to implement, but only in the cases, in which these potential users have defined them indisputably. This proves to be quite a difficult task and makes a certain degree of tension in the public relations of the interested parties. The evaluation of the social efficiency of the crisis actions taken would be interesting. This is a challenge, which from this moment should be considered by researchers – economists, statistical analysts, sociologists, etc (Terziev, Bencheva, Stoeva, Georgiev, 2020). Based on the existing evaluation of the efficiency of social policies in Bulgaria, a well-grounded hypothesis for the expected consequences as well as follow-up action after the real end of the pandemic situation caused by COVID-19, should be searched for. Considering the current situation at a later evaluation of the effect of the active labour market policy is made separately for all programs and measures included in the National Employment Action Plan in 2019, then the active labour market policies should be considered comprehensively and in their integrity, and last but not least two main segments should be included:

- An economic segment, which includes these groups of unemployed people who can relatively quickly find jobs after their participation in the programs and measures end;
- A social segment, which includes the disadvantaged people on the labour market, who would have hard time finding jobs without their participation in the programs and measures. The recommendation made from this analysis would in the following directions (Terziev, 2019-n; Bogdanova, Parashkevova, Stoyanova, 2020a);
- To achieve a high implementation level of the programs and measures included in the National Employment Action Plan even at low unemployment rate, the first segment of the active labour market policy should be created. In this segment the focus should be on the programs and measures that have high effect as well as on some of the target groups:
 - Young people up to 29 years of age, who by participating in programs should easily find jobs on the labour market. Besides that, this effect is expected to be of long-term nature, because their employment is about to begin;
 - People with primary and secondary education level, who even not having any work experience with their school degree, can relatively easily find jobs on the labour market;

- Programs and measures oriented to women, especially when they have good education level and work experience, which are the measures for assisting women going back to the labour market after their maternity leave;
- Encouragement of entrepreneurship, because with it comes the certainty of having jobs and often it can employ more people;
- Programs and measures through which is possible to get qualification, which is in demand on the labour market. Assistance of the people who are close to retirement age who by their participation in programs and measures can retire;
- The programs and measures should be oriented mainly to the employers in the private sector because the participants more often remain employed after the end of the program/measure, namely in the private sector companies;
- The programs and measures should be oriented also to regions where there are or are about to new jobs, since then the effect of active labour market policy can be achieved by consequent employment of the people;
- The active labour market policy should be combined with other policies conducted in the country to achieve the maximum effect. Such policies are in the fields of education, investments and others;
- More programs and measures for the regions to develop in the future as they should be combined with the promotion of investment and other financial stimuli to open new jobs. Thus, the efforts will be directed mostly on these regions where the unemployment is highest and at the same time jobs will be provided there for the unemployed people and in such a way the unemployment would decrease. The implementation of the regional labour market policies in collaboration with the specific conditions of every region and combined with the investment policy, in the future would reduce the high regional disbalances of the unemployment in the country.
- In the formation of the active labour market policies attention should be also paid to the social effects that are achieved. In this sense the focus should be put on the disadvantaged people who are no the labour market and otherwise would hardly find jobs. The active policy in this segment should be oriented to the following target groups:
 - Persons with reduced work capacity and disabilities as well as their assistants;
 - Long-term unemployed persons who have lost their working skills or are desperate that they would find jobs;
 - Persons with low education level, especially who can acquire the qualification which is demanded on the labour market during the program/measure;
 - The people in villages and some provinces can hardly find jobs on the labour market because of the greatly reduced number of free jobs in small villages and towns. Because of this reason the employment policy should be combined with a policy to encourage;
 - Investment and opening new jobs in small villages and towns and regions with high unemployment;
 - In order to reduce the regional discrepancies, the employment policy can be combined with other policies such as the policy of regional development, education policy and the police of encouragement of the active life of elderly people. In such a way the effect of policy combination can generate additional synergistic effect;
 - Stimulation for the employers to open new jobs, especially when they export produce because they get advantage before the competitors at international level or develop sectors of economy which have priorities;
 - Assistance for the people with primary and secondary education levels to get a job through participation in programs and measures;
 - In relation to the people with primary or with no education level, the employment policy should be implemented together with the Ministry of Education and Science as it is

combined with the education policy. The approach should be oriented to sending these people to the schooling system to complete their primary or secondary education as well the acquisition of professional qualification through which they can find jobs on the labour market.

There is an overlapping part of the two segments. For the last few years, an increase of the net effect of the active labour market policies has been observed, which is due to the people with primary education level, as well as the people in the towns. This means that special attention should be paid to them in the active labour market policy and in the future. It is not necessary to close down the programs and measures with insufficient effect, because on the one hand they have a social effect and on the other hand they could increase their net effect in two main ways:

- By a change in the target groups. For instance, to orient them or to require the people to have at least primary education level in order to include them in a specific program/measure;
- The active labour market policy should be combined with other policies such as the education policy. Thus, the people with primary education level or without such could be sent back to the schooling system in order to complete at least primary or secondary education level and after that to include them in the relative programs and measures of the National Employment Action Plan.

In the end, balance between the economic and social segments should be the result in the comprehensive labour market policy. Besides that, it is necessary to keep the variety from different programs and measures, which should affect various target groups as giving priority to one or the other segment would be a political decision as when the unemployment goes down in the country certain policies and measures should get priority, and when the unemployment goes up the focus should be put on other programs and measures. For instance, when the unemployment is high the programs and measures with high net effect should be used, because they quickly reduce the unemployment and at low unemployment – the social segment of the active labour market policy can be intensified (Lybcheva, 2019o; Bogdanova, 2019p).

3. CONCLUSION

The recommendations and priorities that have been set and that are to be implemented by the National Employment Action Plan, should be quickly reconsidered and the ongoing processes should be examined in order to orient them to users who have a special need in this particular situation. First of all, the freshly formed risk groups should be studied and defined, which up to this moment have not existed on the labour market, and also the most critical regions of the country and the relevant industries should be identified. Apparently, the consequences will be multiple, and the processes relatively long in time. This would make it necessary to go back to the approaches, which we implemented at the end of the past century and which are well-adapted and will be easily approbated in the present circumstances, as well as to think about to implement a comprehensive plan, which should reflect the ongoing measures and foresee such that should be implemented consequently. This would require a change in the philosophy of the National Employment Action Plan, which would demand supplementary provision of funds and even human resources with the suitable expertise in the social sphere.

LITERATURE:

1. Bogdanova, M. (2019p). *Sosial policies and programmes in Europe*. // Proceedings of ADVED 2019 - 5th International Conference on Advances in Education and Social Sciences, 21-23 October 2019, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 469-476, ISBN: 978-605-82433-7-8.

2. Bogdanova, M., Parashkevova, E., Stoyanova, M. (2020a). *Agile project management in governmental organizations – methodological issues*. // Proceedings of INTCESS 2020- 7th International Conference on Education and Social Sciences 20-22 January, 2020 - DUBAI (UAE), International Organization Center of Academic Research, Istanbul, Turkey, 2020, pp. 765-778, ISBN: 978-605-82433-8-5.
3. Lybcheva, M. (2019o). *Policies for social development*. // Proceedings of ADVED 2019 - 5th International Conference on Advances in Education and Social Sciences, 21-23 October 2019, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 462-468, ISBN: 978-605-82433-7-8.
4. Terziev, V. (2019). *Social technology as a method for management of the social processes*. // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 331-336, ISBN: 978-605-82433-6-1.
5. Terziev, V. (2019a). *The role and place of social programming in public governance*. // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 331-336, ISBN: 978-605-82433-6-1.
6. Terziev, V. (2019b). *Assessment of the effectiveness of social programing*. // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 363-373, ISBN: 978-605-82433-6-1.
7. Terziev, V. (2019c). *Social efficiency as a measure of social activities*. // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 363-373, ISBN: 978-605-82433-6-1.
8. Terziev, V. (2019d). *Effects of the impact of the active policies on the labor market*. // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 381-395, ISBN: 978-605-82433-6-1.
9. Terziev, V. (2019e). *The legacy for the beginning of the market economy transition in Bulgaria*. // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 301-308, ISBN: 978-605-82433-6-1.
10. Terziev, V. (2019f). *Policies for building a functioning labour market in Bulgaria*. // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 309-316, ISBN: 978-605-82433-6-1.
11. Terziev, V. (2019g). *Factors influencing employment and unemployment policies in Bulgaria*. // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 317-323, ISBN: 978-605-82433-6-1.

12. Terziev, V. (2019h). *The role of business in society*. // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 324-330, ISBN: 978-605-82433-6-1.
13. Terziev, V. (2019i). *Social entrepreneurship in Bulgaria and Europe*. // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 337-345, ISBN: 978-605-82433-6-1.
14. Terziev, V. (2019j). *The role of social policy in economic development*. // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 396-404, ISBN: 978-605-82433-6-1.
15. Terziev, V. (2019k). *Flows of labor force and types of labor markets in the transition economy*. // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 405-418, ISBN: 978-605-82433-6-1.
16. Terziev, V. (2019l). *The good practices in the regulation of social development*. // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 419-429, ISBN: 978-605-82433-6-1.
17. Terziev, V. (2019m). *Methodological approach to research and evaluate the main states and transitions on the labor market*. // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 430-438, ISBN: 978-605-82433-6-1.
18. Terziev, V. (2019n). *The transition labor market- competitiveness of the employee*. // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 439-451, ISBN: 978-605-82433-6-1.
19. Terziev, V., Bencheva, N., Stoeva, T., Georgiev, M. (2020). *Developing social entrepreneurship in the EU: a cross-country analysis*. // Proceedings of INTCESS 2020- 7th International Conference on Education and Social Sciences 20-22 January, 2020 - DUBAI (UAE), International Organization Center of Academic Research, Istanbul, Turkey, 2020, pp. 746-753, ISBN: 978-605-82433-8-5.

THE IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) ON HUMAN RESOURCES

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ABSTRACT

It's impossible to imagine today's business needs without ICT. But, are we really aware of how ICT affects the businesses we develop? In working experience, I realized that the implementation of ICT generate changes on human resources in a way management has not expected. Changes with big impact on the company, so the importance to understand it is extremely important. This motivated me to try to develop a monitoring model, to contribute to economic science and to generalize conclusions that will help managers in similar situations. Descriptive method, quantitative and qualitative analysis, statistical methods, generalization and specialization method, comparative analysis, mathematical and graphical methods were use in the paper. The survey included 209 companies from all Croatian regions, of which 61% small, 21% medium and 18% large enterprises, classified by the amount of total revenues, number of employees and all types of sectors by the national classification. The research confirms the fact that ICT significantly influence to human resources in general increasing the number of employees, thus confirming the hypothesis: ICT generate changes in the human resources of the company. The scientific contribution of the paper is evident in determining the quantitative and qualitative impact of ICT on human resources and in developing a model for monitoring that impact. The practical contribution reflected in the ability to use the research results in the real sector. The paper provides information from previous researches, author's views, conclusions and practical data consequently, that other researchers will be able to critically process, replicate, modify, or apply it. In addition, this paper may be an incentive to explore the impacts of ICT in other areas of the economy.

Keywords: *Human resources, Human resources management, ICT, Management*

1. INTRODUCTION

The research theme in this paper is the impact of the information and communication technology (ICT) implementation related on human resources in the company. Studying economy literature and researching business practice, the need of ICT implementation to all company levels is pointed out. I would like to underline the main contribution of modern ICT: ICT enable the transfer and utilization of all types of information and are the most advanced present technology; they are the basis of economy and society; they are the generator of change in the economy and in all spheres of society; ICT are applicable in all sectors of the economy and in all fields of science; they are the basis for the successful functioning of entrepreneurship and all social and state structures; implementation of ICT in all spheres of the economy is inevitable, so its impact on human resources is inevitable. Today, it is impossible to imagine the business without a networked computer system, internet sales, adequate system of storage, processing, and data transmission in digital form. One of the features of ICT is its rapid development. The development of microelectronics and computing has enabled the development of ICT in the world as one of the most economically promising industries. Transmission of information via image, voice or data is one of the most important prerequisites for the development of modern society, and technologies such as the Internet, www, mobile communications and other ICTs are rapidly evolving and integrating, changing and refining business models. Human resources management as a business function combines jobs and tasks related with people, their acquisition, selection, education and other activities of ensuring and

developing employees. This business function has undergone many stages of development, ranging from the selection of applicants, job placement and personal data storage through professional training to the formulation of a policy that maximizes the integration of all employees in the company and develops people's interest, flexibility and quality of work that combines the interest of the company and its employees. The main subsystems of the human resources function can be reduced to employment, professional development, encouragement of performance at work, discovery of managerial potentials and information in the field of human resources. Each of these subsystems contains a series of processes that are necessary to achieve the human resources functionality. The connection between human resources and ICT stands out in that the implementation of ICT in the company make changes in human resources. The research hypothesis: Information and communication technologies generate changes in the human resources of the company, it is proved by this research and the results are presented in the paper. It shows the changes that have been introduced by the implementation of ICT, regarding the situation on human resources and according to the new situation on human resources in the company, how managers evaluate the changes that have been made, which ones ICT generate the biggest changes, in what types of companies the changes are most pronounced and more.

2. LITERATURE REVIEW

In literature, we can find previews works researching the impact of ICT implementation on human resources, strategic benefits, organizational structure, competitiveness, business, economy sectors and social spheres. Some of them were related on human resources changes because of ICT implementation, but all authors find that ICT significantly make changes on human resources. Papaioannou and Sotiris prove that the effect of ICT implementation in the economy was significant. They researched the impact of ICT on productivity and economic growth in developed countries through direct investment in ICT, finding a significant positive impact. In addition, surveys conducted in more than 36 countries on all continents show significant positive trends in economic growth due to investment in ICT. (Papaioannou, Sotiris, 2004, pp.1-34). Lazarević and Lukić ponited that the actual implementation of ICT requires numerous changes in human resources. One of the most significant factors in determining the success of using ICT are human resources, expecially their knowledge, skills and abilities. Principally, with the development and implementation of new technologies, companies needs new work places, new knowledges and new skills. (Lazarević, Lukić, 2016, pp.369-375). Integration of ICT have a positive influence on human resources management processes by giving more support on administrative functions. Consequently, most benefits noted ensure the attainment of the institutions long term goals. (Karanja et al., 2017, pp. 73-79). Elhazzam point that managers perceive the overall effect of ICT on human resource practices as positive and it is benefitting not only the functioning of Human resource department but of the overall organization. (Elhazzam, 2015, pp.35-48). Skill-biased technical change analyses how the introduction of new technologies generates a bias towards more skilled workers, and causes a relative increase in the demand for skilled workers, since these skilled workers are needed in order to use the new technologies correctly. (Arvanitis, Hollenstein, 2001, pp.377-714). A revolution will be slanted in favour of qualified workers if the new skills are more costly to acquire than those required to operate with old technologies, while it will favour de-qualification if the new skills can be acquired at a lesser cost than the skills or knowledge associated with pre-existing technologies. (Borghans, Ter Weel, 2003, pp. 1561-1576.) The introduction of ICT will affect a smaller number of unskilled workers, but a greater number of workers with skills and knowledge complementary to innovation and ICT. (Cozzarin, Percival, 2006, pp. 195-217). Other studies come to similar conclusions, thereby presenting a strong correlation between the use of ICT and the increase of worker skills, as routine jobs, above all,

will be affected by significant levels of job loss. (Landry et al., 2005, pp. 132-144). Skilled human resources and ICT resources are complementary. Consequently, firms that use one of these resources will show a propensity to use the other resource, jointly with the first, in order to take advantage of the resulting complementarities. (Anderson et al., 2006, pp. 1359-1376) (Falk, Seim, 2001, pp. 98-120). Arvanitis and Hollenstein observe that the level of investment in ICT has been positively affected by the percentage of workers with a university education, and Al-Gahtani notes that the level of education of users is positively related to the use of computers. In accordance with the skill-biased technical change perspective. (Arvanitis, Hollenstein, 2001, pp.377-714) (Al-Gahtani, 2004, pp. 5-29). The absorptive capacity, defined as the firm's ability to value, assimilate, and apply new knowledge, allows firms to deal more adequately with new technologies. When a company wishes to acquire and use knowledge unrelated to its ongoing activity, it must develop absorptive capacity. Investment in human capital becomes more critical in solving the question of the obsolescence of the old abilities, this being the process required by innovation. (Xue et al., 2008, pp. 67-96) (Zwick, 2003, pp. 99-110). Spanos et al. underline the need for multi-skilled personnel to exploit the advantages stemming from ICT adoption. In a study of workers' personal characteristics, (Spanos et al. 2002, pp. 659-675). We can conclude that ICT and human resources are strongly connected and that the impact of ICT on human resources is constantly actual. After the implementation of ICT, new circumstances occurred and new opportunities arise. In consequence, human resources change to adapt the organization on new circumstances. Due to the rapid development of ICT and changes in the business environment, arises the need for researching the ICT impact on the human resources. All the above-mentioned authors, in their papers, pointed out the importance for further research on the ICT affect in other fields.

3. METHODOLOGY

Research methodology involves choosing the theme and identifying research problems, analyzing preview research and set the research needs, defining research goals, setting hypothesis and choosing research methods, studying literature, selection of relevant sources and studying the research process. Trough general and specific scientific researching methodologies, it is necessary to define the sample (i.e. the companies to investigate), after that to formulate a survey, conduct the research and determine research results, processing and analyzing the collected data, generalize conclusions, determining the contribution of the work and write the paper text. The survey included 209 companies of the Republic of Croatia, 52% of them from the Istrian region, 25% from Zagreb region, 11% from Rijeka and Kvarner region, 6% from Slavonia region and 6% from Dalmatia region. According to the Croatian law, 61% of them are small companies, 21% are medium-sized companies and 18% are large companies. Companies are also classified by the total annual revenue amount (varies up to over HRK 250 million, number of employees (varies from 1 to 10,500) and business sector (included all 18 groups by National classification). The questionnaire included 20 questions divided into two modules. The first module collect information about the company: company name, its headquarters, company type, business sector according to the national classification, company size according to the Croatian law, number of employees, total annual revenue, and the types of ICT implemented (Computer, Computer networks, Internet, Mobile Internet, Email, IT systems with common databases and E-business). The second module explores how ICT implementation influence on human resources changes, investigating the size of human resources change after the implementation of ICT; if the change was minor, moderate, large, extremely large or there was no change at all. The changes was put in correlation regarding the company size, annual revenue, business sector and unber of employees, using statistical methods and comparing arithmetic means, with the results on a high level statistical significance.

Moreover, the survey investigated the kind of change in human resources created by the implementation of each implemented ICT type from the first module. The survey proposed the following changes: reducing the number of employees required, increasing the number of employees required, demand for younger employees, demand for employees with higher education, need for employees with special knowledge, need for additional employee education. The survey was conducted by contacting the top management of the company, explaining the research purpose and the methods to be used, then the survey link was sent to the top manager who should log on to the website provided and complete a questionnaire, which automatically records and transmits the answers to an excel table. The survey was conducted online. The obtained data were processed and conclusions were made in base of scientific methods. The survey was conducted for three months, and the statistical data processing was done in a month and a half. Each professional term in the questionnaire and the purpose of the research were explained in detail. All terms were defined and examples are given, to reduce the potential confusion in filling the questionnaire. Therefore, the survey will present the occurred situation, which makes the research itself credible. Statistical processing of the collected data was performed using SPSS version 17.0. The scientific methods used in this paper were descriptive method, quantitative and qualitative analysis, statistical methods, generalization and specialization method, comparative analysis, mathematical methods and graphical method. The primary objective of paper is to study and analyze the impact of ICT implementation on human resources. In order to achieve the research objective, the following tasks were planned:

1. Defining ICT types and human resources changes for the investigation;
2. Defining methods, methodology, hypothesis, sample and research;
3. Processing of obtained data;
4. Interpret the processing results and draw conclusions.

The basic aim of the paper is set in line with the research goal. The tasks that lead to the achievement of the goal include the theoretical elements needed to conduct the research, the research itself, the analysis of the results obtained, and the drawing of conclusions. All set tasks are feasible. The paper hypothesis is: The implementation of ICT changes the human resources of the company.

4. ANALYSIS OF THE SURVEYED COMPANIES

The questions in the survey relate to data related on changes in human resources after the implementation of ICT. The first of these questions, with “yes”, “no” and “I do not know”, was answered the question if the implementation of ICT occurred changes in human resources of the company. There were 126 affirmative answers (60%), 61 negative answers (29%) and 22 indecisive answers (11%). If we compare the number of employees in the company before the implementation of ICT with the number of employees in the company after the implementation of ICT, then the following is noticed:

1. The number of employees decreased in 45 enterprises (22%), remained unchanged in 76 enterprises (36%), increased in 85 enterprises (41%), while for 3 enterprises the data is unknown, which indicates that in most cases it is present increase in the number of employees;
2. Before the implementation of ICT, the number of employees averaged 278 employees per company, and after the implementation of ICT averaged 331 employees, indicating an average increase in the number of employees;
3. Before the implementation of ICT, the number of employees had a median of 12, and after the implementation of ICT 19, which indicates an increase in median value, that indicates an increase in the number of employees;

4. The correlation between the number of employees before and after the implementation of ICT is positive, strong and statistically significant (Spearman's correlation coefficient is 0.89 with $p < 0.01$ and for $n = 206$), which is another unambiguous indicator of the increase in the number of employees.

From the above mentioned, it can be concluded that after the implementation of ICT, there has been a whole increase in the number of employees, which is a certain deviation from previous studies, who showed that the implementation of ICT reduces the number of employees. The reasons for this discrepancy (deviation) are the rapid application and development of ICT, however, if companies did not introduce ICT, the need for additional employees would be even greater. The surveyed companies needed to estimate the size of change in human resources after the implementation of ICT (with a rating of 1 – no change, to a rating of 5 – extremely large change). The answers are summarized in Table 1.

Table 1: Surveyed companies by size of change in human resources (n = 209)

Size of human resources change after the implementation of ICT	Number of companies
No change	32
Minor change	39
Moderate change	76
Large change	46
Extremely large change	16
Total	209

Source: Own research

Table 1 shows that changes in human resources are most often middle size, moderate. When we associate a value of change with values from 1 (no change) to 5 (extremely large change), we can calculate descriptive quantities. Thus the arithmetic mean is 2.88, mode is 3, the median is 3, and the standard deviation is 1.148. As mentioned above, the average size of change in human resources is 2.88. Regarding this value of the size of human resources change, the question arises whether these answers of the company management are statistically significantly different with respect to the different size of the companies, to the different annual amount of revenue, in regard to different business sectors and in regard to the number of employees. These questions can be answered using the t-test or the F-test. A total of four tests were conducted, and the results (one t-test and three F-tests) are presented in Table 2. The meaning (interpretation) is indicated in the text below Table 2.

Table 2: Results of t-tests and F-tests comparing arithmetic means

No.	Variable	Company group	N ₁ N ₂ N ₃	Arit.med.	Stand.dev.	t or F	p	Stat.sign.
1.	Company size	Small Medium Large	128 44 37	2,70 3,02 3,32	1,180 1,110 0,914	4,802	0,009	**
2.	Annual Revenue	Small Medium Large	81 79 49	2,52 2,95 3,37	1,152 1,108 1,014	9,260	<0,001	***
3.	Business sector	Manufacturing Service	114 95	2,84 2,93	1,094 1,214	0,278	0,599	
4.	No.of employees	Small Medium Large	56 101 52	2,41 2,96 3,23	1,172 1,139 0,983	7,841	0,001	***

* statistical significance up to 5%

** stat. significance up to 1%

*** stat. significance up to 0.1%

Source: Own research

The size of change in human resources resulting due to the implementation of ICT is least in small enterprises and larger in large enterprises. The difference in the intensity of changes in human resources among the three groups of enterprises is not random but statistically significant ($p = 0.009$). Companies with a lower total annual revenue have a lower intensity of changes in human resources, while companies with a higher total annual revenue have a higher intensity of these changes. The difference in the intensity of changes in human resources among enterprises of different amounts of total annual revenue is not random but statistically significant ($p < 0.001$). Manufacturing firms have a lower intensity of changes in human resources, while service companies have a higher intensity of these changes. However, the difference in the intensity of changes in human resources between these two groups of companies is random, not statistically significant ($p = 0.599$). Companies with less employees have a lower intensity of changes in human resources, while companies with more employees have a higher intensity of these changes. The difference in the intensity of changes in human resources among enterprises of different number of employees is not accidental but statistically significant ($p = 0.001$). For each of the six types of changes in human resources, the questionnaire had to be answered as to whether or not they had occurred due to the implementation of each particular type of ICT. The results are in the following seven tables (Tables 3 to 9). Table 3 refers to changes in human resources resulting from the use of computers.

Table 3: Surveyed companies according to changes in human resources due to the implementation of computers (n = 209)

The kind of change in human resources created by the implementation of computers	Yes	No	Not sure	Total	% companies with changes
reducing the number of employees required	47	136	17	200	24%
increasing the number of employees required	55	126	19	200	28%
demand for younger employees	104	83	13	200	52%
demand for employees with higher education	99	89	12	200	50%
need for employees with special knowledge	121	65	14	200	61%
need for additional employee education	131	55	14	200	66%

Source: Own research

Due to the use of computers, most changes in human resources occurred in the need for additional education (in 2/3 of enterprises), need for employees with special knowledge (in 61% of enterprises), need for younger employees (in 52% of enterprises), demand for employees with higher education (in 50% of enterprises). Any kind of these six types of changes in human resources occurs in 149 companies out of 200 of them, which is 75%.

Table 4: Surveyed companies according to changes in human resources due to the implementation of computer networks (n = 209)

The kind of change in human resources created by the implementation of computers	Yes	No	Not sure	Total	% companies with changes
reducing the number of employees required	41	117	22	180	23%
increasing the number of employees required	38	122	20	180	21%
demand for younger employees	79	85	16	180	44%
demand for employees with higher education	74	91	15	180	41%
need for employees with special knowledge	93	73	14	180	52%
need for additional employee education	104	61	15	180	58%

Source: Own research

Due to the use of computer networks, most changes in human resources occurred in the need for additional training (in 58% of enterprises) and in the need for employees with special

knowledge (in 52% of enterprises). Any kind of these six types of changes in human resources occurs in 118 companies out of 180 of them, representing 66%.

Table 5: Surveyed companies according to changes in human resources due to the implementation of the Internet (n = 209)

The kind of change in human resources created by the implementation of computers	Yes	No	Not sure	Total	% companies with changes
reducing the number of employees required	34	150	19	203	17%
increasing the number of employees required	40	142	21	203	20%
demand for younger employees	82	105	16	203	40%
demand for employees with higher education	82	106	15	203	40%
need for employees with special knowledge	96	92	15	203	47%
need for additional employee education	111	76	16	203	55%

Source: Own research

Due to the use of the Internet, most changes in human resources occurred in the need for additional education (in 55% of enterprises). Any kind of these six types of changes in human resources occurs in 125 companies out of 203 of them, representing 62%.

Table 6: Surveyed companies according to changes in human resources due to the implementation of the mobile Internet (n = 209)

The kind of change in human resources created by the implementation of computers	Yes	No	Not sure	Total	% companies with changes
reducing the number of employees required	9	122	17	148	6%
increasing the number of employees required	15	115	18	148	10%
demand for younger employees	36	93	19	148	24%
demand for employees with higher education	38	93	17	148	26%
need for employees with special knowledge	42	88	18	148	28%
need for additional employee education	47	82	19	148	32%

Source: Own research

Due to the use of the mobile Internet, fewer changes in human resources were recorded compared to other ICT (in less than a third of companies). Any kind of these six types of changes in human resources regarding the implementation of the mobile Internet occurs in 53 companies out of 148 of them, representing only 36%.

Table 7: Surveyed companies according to changes in human resources due to the implementation of the e-mail (n = 209)

The kind of change in human resources created by the implementation of computers	Yes	No	Not sure	Total	% companies with changes
reducing the number of employees required	20	163	21	204	10%
increasing the number of employees required	29	156	19	204	14%
demand for younger employees	66	122	16	204	32%
demand for employees with higher education	63	126	15	204	31%
need for employees with special knowledge	66	123	15	204	32%
need for additional employee education	86	104	14	204	42%

Source: Own research

Due to the use of e-mail communication, there were fewer changes in human resources in the surveyed companies, approximately one third of the enterprises, mostly due to the need for additional training of employees. Any kind of these six types of changes in human resources occurs in 103 companies out of 204 of them, representing 50%.

Table 8: Surveyed companies according to changes in human resources due to the implementation of common database (n = 209)

The kind of change in human resources created by the implementation of computers	Yes	No	Not sure	Total	% com. with changes
reducing the number of employees required	36	88	16	140	26%
increasing the number of employees required	26	98	16	140	19%
demand for younger employees	55	70	15	140	39%
demand for employees with higher education	57	71	12	140	41%
need for employees with special knowledge	67	61	12	140	48%
need for additional employee education	86	41	13	140	61%

Source: Own research

Due to the use of common databases, most changes in human resources occurred in the need for additional education (in 61% of enterprises). Other types of changes in human resources regarding the introduction of common databases were reported in less than 50% of companies. Any kind of these six types of changes in human resources occurs in 92 companies out of 140 of them, representing 66%.

Table 9: Surveyed companies according to changes in human resources due to the implementation of e-business (n = 209)

The kind of change in human resources created by the implementation of computers	Yes	No	Not sure	Total	% com. with changes
reducing the number of employees required	18	77	16	103	17%
increasing the number of employees required	21	67	15	103	20%
demand for younger employees	33	57	13	103	32%
demand for employees with higher education	36	54	13	103	35%
need for employees with special knowledge	43	48	12	103	48%
need for additional employee education	51	39	13	103	50%

Source: Own research

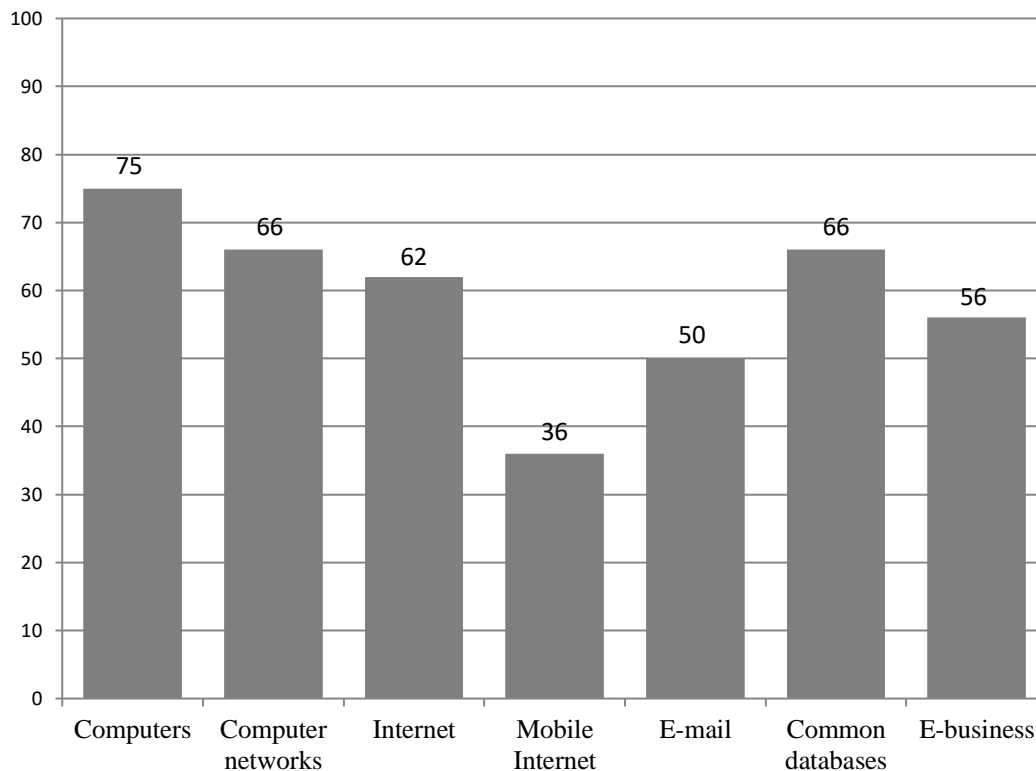
Due to the use of e-business, most changes in human resources occurred in the need for additional education (in 50% of enterprises). Other types of changes in human resources regarding the implementation of e-business have been reported in less than 50% of enterprises. Any kind of these six types of changes in human resources occurs in 58 companies out of 103 of them, representing 56%. At the end of this chapter, the analysis of data on changes in human resources provides a summary of the most important results (Table 10 and Figure 1), that provides a better perception of the obtained results.

Table 10: Companies with changes in human resources after the implementation of any ICT type (n = 209)

ICT type	Companies with ICT	Of these, the number of companies with changes	% companies with changes
Computers	200	149	75
Computer networks	180	118	66
Internet	203	125	62
Mobile Internet	148	53	36
E-mail	204	103	50
Common databases	140	92	66
E-business	103	58	56

Source: Own research

Figure 1: Percentages of surveyed companies that had changes in human resources due to the implementation of certain ICT type



Source: Own research

5. CONCLUSION

Sixty percent (60%) of the surveyed companies confirmed that changes in human resources had occurred due to the implementation of ICT. If we compare the number of employees in the company before the introduction of ICT technologies with the number of employees in the company after the introduction of ICT, then we see an increase in the number of employees as a whole. Before the implementation of ICT, half of the companies employed less than 12 employees, and after the implementation of ICT, this number has increased to 19 employees. Each of the individual type of ICT has caused changes in human resources to a higher or lesser size. The smallest change was due to the use of the mobile Internet (in 36% of enterprises), the larger change was due to the use of computer networks and the use of common databases (in 66% of enterprises), and the largest due to the use of computers (in 75% of enterprises). The resulting changes in human resources differ by type: reducing the number of employees required, increasing the number of employees required, demand for younger employees, demand for employees with higher education, need for employees with special knowledge, needs for additional employee education. Each type of ICT has led to the above changes in human resources. However, when viewed as a whole, after the implementation of ICT, there has been an increase in the number of employees, which is a deviation (discrepancy) from previous research, which showed that the implementation of ICT reduces the number of employees. I suppose the reason for this phenomenon is the rapid adoption and development of ICT, however, if companies did not introduce ICT, the need for additional employees would be even greater, but this is a good thesis for further researches. The analysis of the results of the research showed that the introduction of ICT in enterprises leads to changes within the human resources of the company, which confirms the hypothesis.

However, the rapid development of ICT and the constant changes in business environment, arises the need for researching ICT influence on human resources and also on other fields.

ACKNOWLEDGEMENT: *I would like to thank the management of the surveyed Companies for their contribution and support of my research.*

LITERATURE:

1. Al-Gahtani S.S. (2004). Computer technology acceptance success factors in Saudi Arabia: An exploratory study, *Journal of Global Information Technology Management*, vol. 7, no. 1, United Kingdom.
2. Anderson M.C., Banker R.D. , Ravindran S. (2006)., Value implications of investments in information technology, *Management Science*, vol. 52, no. 9, USA.
3. Arvanitis S., Hollenstein H. (2001). The Determinants of the Adoption of Advanced Manufacturing Technology, *Economics of Innovation and New Technology*, vol. 10, no. 5, United Kingdom.
4. Borghans L., Ter Weel B. (2003), Computers, skills and wages, *Applied Economics*, vol. 35, no. 14, USA.
5. Cozzarin B.P., Percival J.C. (2006). Complementarities between organisational strategies and innovation, *Economics of Innovation and New Technology*, vol. 15, no. 3, United Kingdom.
6. Falk M., Seim K. (2001). Workers' skill level and information technology: A censored regression model, *International Journal of Manpower*, vol. 22, no. 1-2, USA.
7. Karanja D., Kiplang'at Sang A., Ndirangu M. (2017). Influence of Integration of ICT on Human Resource Management in Kenyan Public Universities, *International Journal of Sustainability Management and Information Technologies*, Egerton University, Njoro, Kenya.
8. Landry B.J.L., Mahesh S., Hartman S. (2005). The changing nature of work in the age of e-business, *Journal of Organizational Change Management*, vol. 18, no. 2, United Kingdom.
9. Lazarević S., Lukić J. (2016). The impact of Information and communication technologies on Human resources, *Sinteza 2016. Interbnational scientific conference an ICT and e-business related research*, Belgrade, Serbia.
10. Papaioannou T., Sotiris K. (2004). FDI and ICT Innovation Effect on productivity growth - A Comparison between developing and developed countries, *Athens University of Economics and business journal*, Athens, pp. 1-34.
11. Spanos Y.E., Prastacos G.P., Poulymenakou A. (2002)., The relationship between information and communication technologies adoption and management, *Information and Management*, vol. 39, no. 8, United Kingdom.
12. Xue Y., Liang H., Boulton W.R. (2008). Information technology governance in information technology investment decision processes: The impact of investment characteristics, external environment, and internal context, *MIS Quarterly: Management Information Systems*, vol. 32, no. 1, USA.
13. Zwick T., (2003). The impact of ICTs investment on establishment productivity, *National Institute Economic Review*, vol. 184, no. 1, United Kingdom.

ALIGNED EMPLOYEE VOICE AND MANAGER VOICE AFFECTING INNOVATION WORK BEHAVIOUR: A CASE STUDY IN JORDANIAN BANKS

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ABSTRACT

Innovation has become an essential tool to achieve success and long term survival in the bank sector in the Hashemite Kingdom of Jordan. And innovation work behaviour considers an important factor for the field of individual innovation which leading to innovative output. While employees 'voices and opinions play an increasingly important role in improving organizational innovations. The manager's behaviours consider the essential tool to stimulate the employee voice and enable innovation behaviour. However, drawing on the social exchange theory the purpose of this study is to examine the impact of the alignment between employee voice and manager voice on the innovation work behaviour in three banks. With attempted to extend the studies in the context of innovative work behaviour and voice behaviour. To achieve these objectives, a paired questionnaire was developed and used to collect data by 80 employees and their direct managers. However, the Statistical Package for Social Sciences program was used to analyse and test the hypotheses. The findings of the study showed that there is significant existence of alignment between employee voice and their manager voice. Furthermore, voice behaviour yields a significant predictive value for intended innovative behaviour in the workplace. Therefore we suggest maintaining the current alignment between Employee voice and the manager's voice and if possible develop it. Despite the plenty studies of voice behaviour, this study is the first in comprehensively examine the existence of alignment between employee voice and manager voice and the role of this alignment on the innovation work behaviour, with the aim to help the practitioners to develop and improve their work innovation behaviour and provide a practical insight to exploit internal opportunities and foster employee voice. As well as and due to the lack of previous researches focused on the study voice behaviour in the developing countries.

Keywords: *Employee voice, Manager Voice, Innovation work behaviour*

1. INTRODUCTION

Today's business environment faces critical challenges and difficulties, especially with modern technological developments and globalization, making it difficult for their leader to predict the future consequences of the organizations (Jaiswal, Neeraj & Dhar.2015). Therefore, businesses need to be creative and innovative if they want to survive and grow in a competitive and increasingly demanding world (Pretorius, Millard & Kruger, 2005). However, the ability of organizations to innovate constantly is due to the innovative capabilities of their employees, who are considered the fundamental source of creativity (Kanter, 1988: Janssen 2000) through communicating and implementing the creative ideas to management (Van Dyne & LePine, 1998). A previous study revealed that the essential way in which employees generally contribute to the idea generation process in an organization is through voice (Felipe & Alvaro.2019). Voice is a verbal expression in how employees engage and participate in idea expression with the aim to improve work performance (Wilkinson & Freeman 2014:

Felipe&Alvaro.2019). Previous studies in (innovative behaviour (Scott & Bruce, 1994), and voice behaviour (Van Dyne & LePine, 1998) suggests that when an employee speaks in a particular way in an organization will stimulate creative ideas (Joel,2017). Moreover, the manager's attitude and behaviour is considered a significant factor that encourages employees and motivates them to speak up and voice their thoughts (Van Dyne, 1998). However, voice behaviour for both manager and employee has become an important concept in organizational behaviour and the previous study agreed on the positive outcome the voice have on employees at work (Wang Xu, Sun 2019). Therefore, the agreement and the alignment between employee voice and manager voice should be taken into consideration because ineffective harmonization between them will influence the innovative performance. As such, the primary objective of this study is to explore the existence of the alignment between the manager voice and employee voice and examine the effect of this alignment on the innovation work behaviour in three banks at the Hashemite Kingdom of Jordan. Although we have seen a growing body of literature on the determinants and key influences of innovative work behaviour which consider essential in many contemporary management concepts, such as leadership (Scott & Bruce, 1994), voice behaviour (Van Dyne, 1998). But there still some gaps remain due to explore the relationship and interactions effect between leaders and employees' characteristics and their innovation capabilities (Afsaneh.2017). Moreover, numerous studies have also highlighted the influence of the leadership - innovation relationship in the organization but there are no studies that try to measure the alignment effect between employee voice and the manager voice. Therefore, as a result, this study is prepared to be one of the first studies to shed light on voice alignment. Second, investigating how innovation work behaviour affected by this alignment to perform more creativity has received little empirical attention in voice-related literature. Third, the study extends the literature by developing predictions about how a specific leader's perceptions will stimulate employee voice and engagement and how it will reflect on innovation work behaviour. The current study uses social exchange theory as the root theoretical. The results could improve our understanding of the processes by which innovation work behaviour influences.

2. THEORETICAL BACKGROUND

2.1. Voice behaviour

Voice is "an act of verbal expression, discretionary behaviour, and constructive in the nation", which means that employees should have the choice whether or not to engage and when to participate in a particular situation (Wilkinson & Freeman.2014). Employee voice expresses the employee's interests, thoughts, and concerns to participate in organizational decision making (Kim, 2010). The main purpose of voice is not only to criticize or prevent the negative outcomes but mainly to bring positive effects and foster organization's improvements (Morrison's 2011). Voice characterized as a proactive mechanism (Parker & Collins .2010). Employees through voice participate in the decision-making process with their thoughts and opinions (Morrison & Milliken. 2000). (Budd & Wilkinson 2010; Heller .1998) illustrate several scenarios of the voice definition, by concentrate on employee participation, some authors argued that participation is held by group pattern, while others indicate it's an individual process by enabling the employee to make decisions, and some refer to participation as informal participation in daily workday that illustrates the relationship between the employee with his/her supervision. As a result there are two fundamental issues we can notice, the extent the employee can express his/her thoughts and concerns within the organization policy. And the association between the employee voice and employee satisfaction. Practitioners and academic literature identify and employ the voice of employees in different domains some research refers to the employee voice as involvement and participation while others refer to it as empowerment and engagement. (Wilkinson, & Freeman. 2014; Van Dyne & LePine, 1998).

They also emphasize that voice behaviour must be distinct from other organizational behaviour like organizational dissent and complaining, because the voice is distinct from the normal role when the expression of the constructive challenge is not specified in formal job requirements. Previous studies focus on employee involvement, and participation in day to day operations using upward problem solving, and associate the term of the voice with the union role, but this thought was changed years after and the voice becomes associated with employee-manager relationship and communication with more concentrate on how employee able to express their opinion regarding their work situations and conditions (Wilkinson, & Freeman. 2014). Leadership style is associated with employee voice. (Dedahanov & Yoon 2016; Chan, 2014). As leaders, managers make a critical contribution to facilitating employee voice (Dedahanov & Yoon 2016). Voice is associated with contextual performance because it is challenging and may upset interpersonal relationships (Van Dyne & LePine, 1998). Therefore the leadership pattern may affect the organization's performance and hence will affect organizational productivity. Employee voice that is stimulated by leadership behaviour may consider a significant factor toward superior performance. On the other side, employees may keep silent even if they realize specific problems or figure out new ideas to improve their work (Zhang & Xie 2015). Therefore how to stimulate employee and encourage them to speak out and exercise their voice it's important to both leader behaviour and organizational productivity. There is scarce literature on the manager's voice, therefore in this study manager voice refers to a manager's behaviour that can use to promote voice from their employees. Managers, as the main authority figures, consider the main role in stimulating or limiting employee behaviours by determining whether employees feel that it is worthy or safe to voice concerns, make suggestions, and pursue to improve operations. (Zhang & Xie 2015) Previous research has found that subordinates feel free to voice their thoughts positively when their leaders exhibit transformational leadership. (Detert & Burris, 2007), and when employees perceive the value and the appreciation from their supervisors for their efforts and work, they will react with more desire to give more. (Zhang & Xie 2015; Tyler & Blader, 2003; Tyler & Degoe, 1995) Employees act and behave after evaluating the behaviour of their manager. Moreover, drawing on the social exchange theory which indicates that individuals provide favours to those who provide benefits to them. Social exchange theory also suggest that LMX theory emphasizes on the importance of the relationship between supervisor and subordinate and how this relation effect employee performance (Xerri, M. 2012). Therefore, when manager behaves in a rigorous pattern and makes employee follow their orders, individuals become unwilling to favour their organization and hence affect organization performance, from another side, the more manager behave honestly and respectfully and equally the more their employee try to give their best and improve their work (Dedahanov & Yoon (2016). Alignment achieved by empowering people through communication in the organization and integration of all levels of employees (Kotter 1999). As Kotter 1999, said 'what executives need to do, however, is not organize people but align them '. Therefore it's important to examine the level of agreement and the harmonization between both employee voice and their direct manager voice and thus generate this hypothesis:

- **H1:** The existence and extent of alignment between employee voice and manager voice is measurable.

2.2. Innovation work behaviour (IWB)

The importance of innovation in organizations has been demonstrated by a number of studies and continues to be one of great interest to researchers and practitioners. Among the various definitions of innovation in the literature, yet there is no single definition by which innovation can be defined. West and Farr (1990) considered one of the most comprehensive and relevant, who define innovation as intentional introduction and application of new ideas, processes, products or procedures which are relevant to the unit of adoption and that provide significant

benefits to the individual, group, organization or society as a whole. Moreover, Jansson (2000) also describes innovation work behaviour (IWB) as a complex multidimensional behaviour that consist of three main stages, idea generation, idea promotion, and idea implementation. However, basic innovation is usually shaped by individuals and a more sophisticated form of innovation may be shaped by a group work (Janssen, 2000). Although various definitions have been proposed of innovation there is still some confusion when compare it with creativity. However, some researchers provide a clear distinction between creativity and innovation (Oldham & Cummings, 1996; Rank, Pace & Freese, 2004), some of them argue that creativity does not exist only in the idea generation phase while others suggest that creativity exist in a generation and implementation phase (Paulus, 2002). Some literatures refers to creativity as an attitude and personal characteristic that would be necessary for innovation. (Miron, Erez, & Naveh, 2004). Confusion and ambiguity in the use of innovation concepts probably stem from the lack of use of the concepts in empirical research. Therefore, it is important to identify which concept we are referring to before using creativity, idea generation, and innovation. The literature on innovation reveals that innovation as a multistage process could be seen in the individual level, team level, and the level of the organization. (Janssen, 2000: Kanter, 1988) Recently, a call for the use of a multi-level perspective has been made. As a result in this study, we are following the work of (Jong, & Den Hartog 2008), based on this study innovation work behaviour are distinguished in four dimensions that consist of idea generation, idea exploration, idea championing, and idea exploitation. The researcher considers the generation process a broad concept that should include both explore and generate ideas, therefore, the exploration phase was added as the first phase, furthermore, she argues that the innovation process usually starts with the discovery process, when a problem happened or when the opportunity comes up, which give the motivation to improve some process and searching for efficient solutions (Drucker, 1985-2008) and also to find different methods to do work (Kanter-1998-2004). After the exploration phase, generating ideas should start, the process idea generation includes find new solutions, products, and services, and improve current procedures (kanter1988). It's the idea generation phase that most closely resembles creativity. The third phase is idea championing, the phase where the person who generate the idea tries to disclose it and seek allies for the promotion at all levels of the organization (Jong, & Den Hartog 2008: Kanter, 1988). According to Scott & Bruce (1994), innovation behaviour in the work includes actions associated with these phases, such as the search for new ideas, their promotion, and the search for resources and planning to implant them. However, the championing phase has limited appeared in the literature. Finally. The last phase is the implementation of the idea, implementing the idea and make it happen, the production of a new idea of the innovation being thought of, which ultimately should be implemented within the organization (Kanter, 1988). This study defines IWB as an employee's action that directed at the generation, application, and implementation of novelty ideas, products, processes, and methods to his or her job position, departmental unit, or organization. However, the innovative behaviour of employees in their work is indeed crucial for the proper functioning of organizations (Amabile, 1988; Battistelli, Odoardi & Montani, 2013; West & Far, 1990). Innovation is viewed as a social process in view of the interaction between those who innovate and those who are affected by innovation (Jain, 2010). Innovation work behaviour is a complex, multi-level, and emergent phenomena that evolve over time, and that requires a competent manager in order to exploit the benefits of new ways of working (Janssen, 2000). The need for a supportive environment for innovation among banking employees, and for innovative capabilities to be the first element in the job capabilities for a manager's position (Bysted, 2013). Managers should realize the conditions that consider as a driver toward creativity and innovative behaviour and deep understanding of the relationship with their employees to encourage them and foster their behaviour (Bysted, 2013).

On both levels, employees and managers consider as an objective in innovation research. Indeed, understand the philosophy of innovative behaviour and performance at the employee level is most relevant. To understand in-depth what factors stimulate, promote, activates, and support innovation for the employees is essential, which must put in place the importance of manager's practices that can foster innovation. The manager level also remains essential because understanding what the factors that drive innovation is crucial. As a result, we investigate of the effect of this association in both levels, by examining the voice alignment on the innovation behaviour of employees, thus generate this hypothesis.

- **H2:** There is a statistically significant impact voice alignment between employee voice and manager voice on innovation work behaviours.

Research Model:

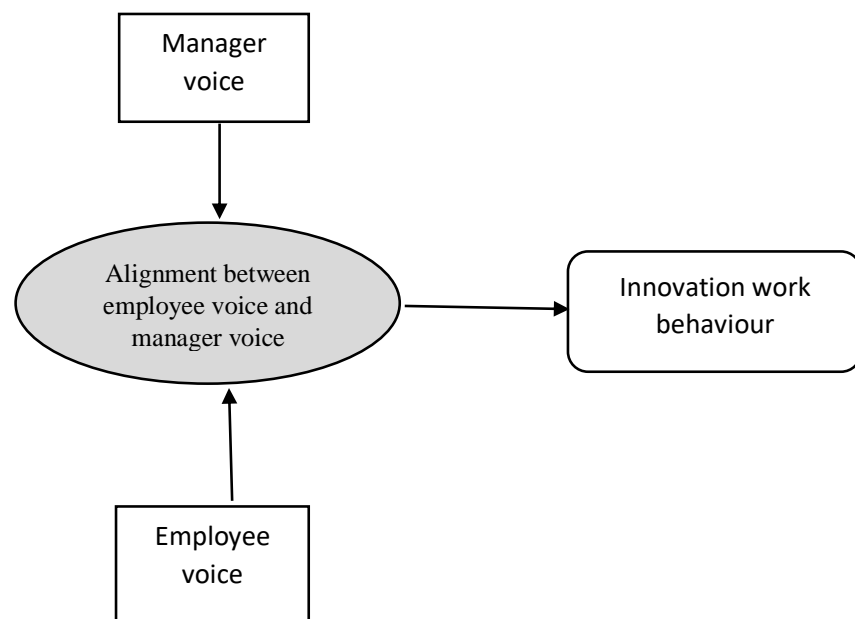


Figure 1: Conceptual Framework

3. RESEARCH METHODOLOGY

3.1. Study population and sample

The current study relied on the exploratory approach and deductive methods are used because this type is based on defining the phenomenon and its nature, describing the relationship between the variables of the study and its directions, and extracting generalizations related to the phenomenon being studied, the sampling-survey strategy was adopted, where the questionnaire was distributed to a representative sample of the study community. Given that innovation is not limited to a specific department or category of employees with a specific task (de Jong 2007), therefore the participants in the surveys targeted the managers and their employees in the functional departments (human resources, research, and development, marketing, branches, electronic channels, another department) in three banks in Jordan. The sample consisted of 80 respondents, 40 employees, and 40 direct managers. Subordinates were asked to rate the items pertaining to the manager's behaviour that can use to promote the voice, while managers and supervisors rated items pertaining to the innovative behaviour and voice perceptions of their employees. Moreover, the process of distributing the questionnaires was carried out under the supervision of the Human Resources Department, respondents have been contacted to fill a structured questionnaire in paper form or invited them by email using an online survey.

To explain the aim of the research and filling procedures, we confirm the confidentiality of the process and the data gathered by emphasizing in the cover letter of the data confidentiality assurances. Although the English language is the official language in conducting the formal procedures in Jordanian banks the questionnaire's language was constructed in both English and Arabic to ensure a full understanding of the items while filling procedures.

3.2. Measures

All variables were measured using items adapted from published literature to insure validation.

3.2.1. Measures Completed by Supervisors

Innovation work behaviours: IWB was measured using a questionnaire of six-nine items were developed by (De Jong & Den Hartog, 2010). The scale items will measure employees' innovation work behaviour in four dimensions including idea exploration, idea generation, idea championing and idea implementation, using Five-point scale ranging from "Never" to "Always", for example, the items include, (Pay attention to issues that are not part of his daily work), (Wonder how things can be improved). Cronbach's α coefficient for this scale was 0.838, suggesting that the items have relatively acceptable internal consistency. Employee voice: employee involvement and contribution, was measured using a questionnaire of six items that were adopted from LePine and Van Dyne (1998) as cited by (Alisher Dedahanov, Junghyun Yoon, 2016). The items were designed using five Likert scales ranging from "Strongly Agree" to "Strongly Disagree" for example the items include, (systematically introduce innovative ideas into work practices), (I develop and make recommendations to my supervisor concerning issues that affect my work). Cronbach's α coefficient for this scale was 0.833, suggesting that the items have relatively acceptable internal consistency. Manager voice: to measure the manager's behaviour that can use to promote employee voice, a questionnaire of six items was adopted from LePine and Van Dyne (1998) as cited by (Alisher Dedahanov, Junghyun Yoon, 2016). The items were modified to ask supervisors rather than an employee using five Likert scales ranging from "Strongly Agree" to "Strongly Disagree" for example the items include, (Employee develops and makes recommendations concerning issues that affect work), (Employee speaks up and encourages others to become involved in issues that affect the organization). Cronbach's α coefficient for this scale was 0.869, suggesting that the items have relatively acceptable internal consistency.

3.3. The result of the analysis

3.3.1. Demographics descriptive statistics

The characteristics of the employees as showed in table 1 in the appendix. In regard of respondent's gender, the results show that the male was 16 (40%), while the female was 24 (60%). Regarding the age, the results revealed that the most sample with a percentage 52.5% fall between 25 – 30 years, while (30%) of employees fall between 30 – 35, this result may have occurred considering that the majority of employees are youth and fresh graduates. Furthermore, the educational level, the results revealed that the (80%) of employees are BSc Holders, and Master's degree reached (10%). Regarding the experience of respondents in their current position were divided as follows: less than 4 years (50%), while the 4 – 6 years (25%), meanwhile the 7 – 9 years (15%), and finally the total Experience of employees revealed that most of them have between 10 to 12 Years %35. While the 10 – 12 years of experience results revealed with (35%) and less than 4 years as a first job for them. The characteristics of the managers and supervisors as showed in table 2 in the appendix. In regard to respondents' gender, the results show that the male 21 were (%52.5), while the female was 19 (%47.5). Regarding the age of managers, the results revealed that most of them fall between 35 – less than 40 Years (30%), and 45 – less than 50 Years (30%) this result may have occurred considering that the

majority of managers must have years of experience. Furthermore, the educational level, the results revealed that the BSc Holders was (%57.5), and the Master's degree reached (%37.5). Regarding the experience of managers in their current positions were divided as follows: less than 4 years (30%), while the 4 – 6 years (22.5%), meanwhile the 7 – 9 years (32.5%), and finally most managers have 13 years and more (50%) and this is expected as an expert in the banking sector.

3.3.2. Descriptive statistics

Descriptive statistics were done by showing how the respondents have answered the items in the survey, this allows us to feel the data and determine the main trends in the research.

No.	Construct	Mean	Std. Deviation
	Independent variables		
	Manager voice	4.19	0.59
1	Employee develops and makes recommendations concerning issues that affect work.	4.325	0.4743
2	Employee speaks up and encourages others to become involved in issues that affect the organization.	4.325	0.57233
3	Employee communicates his/her opinions about work-related issues to others even if his/her opinion is different and others may disagree with him/her.	4.325	0.69384
4	Employee keeps well informed about issues where his/her opinion might be useful to work.	4.15	0.73554
5	Employee speaks up with ideas for new projects or changes in procedures.	3.775	0.57679
6	Employee meets performance expectations.	4.275	0.50574
	Employee voice	4.2	0.612952
1	I develop and make recommendations to my supervisor concerning issues that affect my work.	4.250	0.54302
2	I speak up and encourage others in my work unit to get involved in issues that affect our work.	4.275	0.59861
3	I communicate my opinions about work issues to others in my work unit, even if their opinions are different and they disagree with me.	4.250	0.58835
4	I keep well informed about issues at work where my opinion can be useful.	4.125	0.64798
5	I get involved in issues that affect the quality of life in my work unit.	4.025	0.65974
6	I speak up to my supervisor with ideas for new projects or changes in procedures at work.	4.275	0.64001

Table 3: Descriptive Statistics of manager voice and employee voice

Table 3 shows that the mean value of all managers' voice items is (4.19). The most important items are the first three items with a mean value (4.325) for each of them, which indicate managers' behaviours regarding employee contribution and communications of issues that affect work. Most managers agree that employees contribute and encourage others to express their opinion. while the lowest mean value for the manager's voice with a mean value (4.025) regarding involving the employee in the issues that effects the quality of life in work, this result may due to the formal culture and restricted regulation in banks. Moreover, in regard of the employee voice, the overall mean value is (4.2) with a high level of the relative importance that reflect a high existence for employee voice, the results revealed that items number (2, 6) have the highest mean value with (4.275) that express employee contribution and involvement in

work issues, while item number (5) has got the lowest mean value (4.025) regarding involving the employee in the issues that effects the quality of life in work.

No.	Construct	Mean	Std. Deviation
	Innovation work behaviour	3.9725	0.726106
1	Pay attention to issues that are not part of his daily work?	3.400	0.67178
2	Wonder how things can be improved?	3.850	0.62224
3	Search out new working methods, techniques or instruments?	3.925	0.76418
4	Generate original solutions for problems?	3.975	0.73336
5	Find new approaches to execute tasks?	4.000	0.81650
6	Make important organizational members enthusiastic for innovative ideas?	3.700	0.91147
7	Attempt to convince people to support an innovative idea?	3.975	0.76753
8	Systematically introduce innovative ideas into work practices?	4.375	0.66747
9	Contribute to the implementation of new ideas?	4.225	0.61966
10	Put effort in the development of new things?	4.300	0.68687

Table 4: Descriptive Statistics of IWB

Table 4 shows that the overall mean for innovation work behaviour is (3.97) which reflects a high level of existence for innovation work behaviour. The highest mean value is for the items (8, 10) with a mean (4.37, 4.3). The items (8, 10) express managers opinions regarding employees who introduce innovative ideas into their work practices in a systematic way and how much their employees put the effort into the development of new things in their work. While item number (1) has got the lowest mean value (3.400) regarding how much employees is pay attention to issues that are not part of their daily work.

Table following on the next page

Independent Samples Test										
Voice alignment		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
1	Equal variances assumed	.044	.834	.658	78	.513	.075	.114	-.152	.302
	Equal variances not assumed			.658	76.616	.513	.075	.114	-.152	.302
2	Equal variances assumed	.000	.984	.382	78	.704	.050	.131	-.211	.311
	Equal variances not assumed			.382	77.843	.704	.050	.131	-.211	.311
3	Equal variances assumed	2.806	.098	.521	78	.604	.075	.144	-.211	.361
	Equal variances not assumed			.521	75.971	.604	.075	.144	-.211	.361
4	Equal variances assumed	.821	.368	.000	78	1.000	.000	.153	-.306	.306
	Equal variances not assumed			.000	77.087	1.000	.000	.153	-.306	.306
5	Equal variances assumed	.079	.779	-1.804	78	.075	-.250	.139	-.526	.026
	Equal variances not assumed			-1.804	76.633	.075	-.250	.139	-.526	.026
6	Equal variances assumed	2.815	.097	.000	78	1.000	.000	.129	-.257	.257
	Equal variances not assumed			.000	74.042	1.000	.000	.129	-.257	.257

Table 5: Independent Samples Test

3.3.3. Hypothesis testing

H1: The existence and extent of alignment between employee voice and manager voice is measurable.

To test this hypothesis, a t-test for independent samples was used. The results are as follows: from the table 5, it can be seen that there is no difference between the average responses of managers voice and employees voice, as the calculated value of the first item is, (t (78) = .658, p = 0.513, two-tailed), second item, (t (78) = .382, p = 0.704, two-tailed) third item, (t (78) = 0.521, p = 0.604, two-tailed), fourth item (t (78) = 0.00, p = 1.00, two-tailed), fifth item, (t (78) = -1.804, p = 0.75, two-tailed), last item, (t (78) = 0.00, p = 1.00, two-tailed) which are not significant at the level ($\alpha \leq 0.05$). The p-value is more than 0.05 for each of the six items in the table above and, therefore, the difference between the managers' voice and employees' voice is not significantly different from zero at the 5% level of significance. Based on the above discussion, we conclude that there is an association between the opinions of both managers and employees, in other words, there is an agreement of the opinions between both managers and their employees about work issues in the banks in terms of participation, expressing an opinion, developing and making recommendations, speaks up with ideas, moreover, become involved in issues that affect the organization, meet performance expectations and communicates his/her opinions about work-related issues. Thus, this research accepts the hypothesis **H1** The existence and extent of alignment between employee voice and manager voice is measurable.

H2: There is a statistically significant impact of voice alignment (between employee voice and manager voice) on innovation work behaviours.

To test the second hypothesis, multiple linear regression analysis was used to determine whether manager voice and employee voice alignment affect the innovation work behaviour, and the results are presented below:

Tables 6: Multiple linear regression analysis

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.595 ^a	.355	.237		.4077319

a. Predictors: (Constant), voice items 1-6

Table 6.1: Adjusted R square is (0.237), this means that the independent variables (voice alignment) explain (23.7%) of the variations in the dependent variable

ANOVA ^b					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	3.014	6	.502	3.021	.018 ^a
Residual	5.486	33	.166		
Total	8.500	39			

a. Predictors: (Constant), voice items 1-6

b. Dependent Variable: IWB

Table 6.2: Based on the (F) value (3.021) and the p-value (sig. =0.018), the model is significant

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1.658	.966		1.715	.096		
item1	.492	.225	.375	2.189	.036	.665	1.504
item2	-.240	.190	-.224	-1.268	.214	.625	1.599
item3	.320	.157	.346	2.040	.049	.681	1.469
item4	-.211	.169	-.203	-1.250	.220	.740	1.352
item5	.533	.183	.552	2.910	.006	.544	1.839
item6	-.314	.200	-.304	-1.565	.127	.519	1.928

a. Dependent Variable: IWB

Table 6.3: The items that have significant effect on the dependent variable are item 1 ($t = 2.189$, $p\text{-value} = 0.036$), item3 ($t = 2.040$, $p\text{-value} = 0.049$), and item5 ($t = 2.910$, $p\text{-value} = 0.006$), this indicates that there are significant effects of the independent variables of voice alignment on the dependent variable innovation work behaviour, all items have a positive effect on the dependent variable

From the table (6.1) we found the adjusted R square is (0.237), this means that the independent variables (voice alignment) explain (23.7%) of the variations in the dependent variable (innovation work behaviours). Moreover, from the table (6.2), based on the (F) value (3.021) and the p-value (sig. =0.018), we conclude that the model is significant. And it is noticed from the table (6.3) that the "VIF" value for each of the independent variables is less than (10), the results of the collinearity statistics of "VIF" showed that there is no multicollinearity within the data. From table (6.3), we found that the items that have significant effect on the dependent variable are item 1 ($t = 2.189$, $p\text{-value} = 0.036$), item3 ($t = 2.040$, $p\text{-value} = 0.049$), and item5 ($t = 2.910$, $p\text{-value} = 0.006$), this indicates that there are significant effects of the independent variables of voice alignment on the dependent variable innovation work behaviour, and we can also notice that all items have a positive effect on the dependent variable. As regression analysis results have shown, when voice alignment increases, the IWB level also increase.

Based on that our results confirm the second hypothesis which indicates that there is a statistically significant impact of voice alignment (between employee voice and manager voice) on innovation work behaviours.

4. DISCUSSIONS & CONCLUSIONS

Despite increasing research on voice behaviour and innovation work behaviour major gaps still exist, this research identifies one of these gaps by examining the alignment of the role between employee voice and manager voice and the impact of this alignment on innovation work behaviour. Most previous studies agreed that the more an organization allows its employees to express their opinion and concerns regarding their conditions and work issues, the more positive impact will return on the organization's productivity and innovative performance (Kremer, 2019). Therefore, this motivates us to extend the previous studies on voice literature and innovation work behaviour as (Kremer et al., 2019; Felipe, 2018; Wang and Liu, 2019). Moreover, the literature extended to help managers to understand the importance of employing the factors and the conditions that motivate employees to speak up and express their concerns. Better awareness can reduce perceived risks and enable empowerment among employees (Burroughs et al., 2011; Zhang and Bartol, 2010). A study by De Jong and Den Hartog (2007) and Janssen (2005) conclude that the more leader treat their employee with supportive manners the more will employees behave in innovative patterns. Managers, therefore, have to highlight employees who put any effort into being innovative and publicly appreciate their efforts. In particular, it is essential to employ this in departments whose main focus on novelty is achieved via the innovation process (Wang & Liu, 2019). Furthermore, this study trying to advance our understanding regarding the role of manager-employee relationship and oriented leadership and to highlight this implication on employee innovation behaviour. The findings suggest that managers should focus their attention on creating internal acceptance of innovative initiatives, and encourage employee to pay attention to issues that are not part of their daily work. Moreover, the results emphasized the necessity of maintaining a positive interactive relationship between the manager and his employees to reach innovative results by enhancing the employee's voice on one hand and getting that voice heard by the manager on the other side. In light of the findings of this study, a set of recommendations have been set in place that it is hoped that will provide directions for bank managers and lead to improve the level of innovative behaviour among employees in Jordanian commercial banks to become more effective. First of all, as the success in the banking sector requires working with team spirit in collaborative manners hence, there is a need to hold training courses for managers in Jordanian commercial banks whose main work focuses on stimulating individuals and developing their capabilities to deal with their subordinates and motivate them towards creativity. Moreover, there is a need for bank departments to pay more attention to employees with creative attitudes who able to generate new ideas and provide them the full support and encouragement to stimulate their creativity, and it's important to provide them with protection to avoid being afraid of the risks arising from this behaviour. The findings provide directions for bank managers on the importance of designing the internal work conditions in such a way that employees receive encouragement from their direct supervisors. Furthermore, in this context, managers need to design a creative environment in their department and adopting empowerment as a method and philosophy in banks. It is important for the employees to feel appreciated and have the freedom to control or choose the working conditions around them. Finally, eliminate restrictions and barriers conditions that may discourage the understanding of the relationship between the manager and his employees, and work to smoothly and easily supply and receive ideas in the bank's departments without pre-empting judgments.

LITERATURE:

1. Amabile, T.M. (1988). A model of creativity and innovation in organizations. In B.M. Staw & L.L. Cummings (Eds.), *Research in organizational behaviour*, 10, pp. 123-167.
2. Amabile, T.M., Conti, R., Coon, H., Lazenby, J. & Herron, M. (1996). Assessing the work environment for creativity, *Academy of Management Journal*, 39 (5), 1154-1184.
3. Amabile, T. M., Barsade, S. G., Mueller, J. S, & Staw, B. M. (2005). Affect and creativity at work. *Administrative Science Quarterly*, 50, pp. 367-403.
4. Anderson, N, & Potočník, K & Zhou, J. (2014). Innovation and Creativity in Organizations: A State-of-the-Science Review, Prospective Commentary, and Guiding Framework. *Journal of Management*. 40(5),
5. Anderson, N. R., & West, M. A. (1998). Measuring climate for work group innovation: Development and validation of the team climate inventory. *Journal of Organizational Behaviour*, 19, 235-258.
6. Anderson, N., De Dreu, C.K. & Nijstad, B.A. (2004). The routinization of innovation research: a constructively critical review of the state-of-the-science, *Journal of Organizational Behaviour*, 25 (2), pp. 147-173.
7. Adegbo, O., Munshi, N & Walumbwa, F. 2009, 'The Influence of Leadership on Innovation Processes and Activities', *Organizational Dynamics*, 38(1), pp. 64-72
8. Bagheri, A. (2017). The Impact of Entrepreneurial Leadership on Innovation Work Behaviour and Opportunity Recognition in High-Technology SMEs. *The Journal of High Technology Management Research*, 28(2), pp. 159–166,
9. Bysted, R. (2013) 'Innovative employee behaviour', *European Journal of Innovation Management*, 16(3), pp. 268–284
10. Budd, J. W., Gollan, P. J. and Wilkinson, A. (2010) 'New approaches to employee voice and participation in organizations', *Human Relations*, 63(3), pp. 303–310.
11. Carnevale, J.B., Huang, L., Crede, M., Harms, P.D., & Uhl-Bien, M. (2017). Leading to Stimulate Employees Ideas: A Quantitative Review of Leader–Member Exchange, Employee Voice, Creativity, and Innovative Behaviour. *Applied Psychology*, 66 (4), pp. 517–552
12. Duan, J., Li, C., Xu, Y., & Wu, C. (2016) 'Transformational leadership and employee voice behaviour: A Pygmalion mechanism', *Journal of Organizational Behaviour*, 38(5), pp. 650-670
13. Detert, J. R., & Burris, E. R. (2007). 'Leadership Behaviour and Employee Voice: Is the Door Really Open?' *Academy of Management Journal*, 50(4), pp. 869-884.
14. Guzman, F., & Espejo, A. (2019) 'Introducing changes at work: How voice behaviour relates to management innovation'. *Journal of Organizational Behaviour*. 40(1), pp. 73-90
15. Jaiswal, Neeraj Kumar, and Rajib Lochan Dhar. "Transformational Leadership, Innovation Climate, Creative Self-Efficacy and Employee Creativity: A Multilevel Study." *International Journal of Hospitality Management*, 51, pp. 30–41,
16. Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. ' *Journal of Occupational and Organizational Psychology* ', 73(3), pp. 287–302
17. Janssen, O. (2004). How Fairness Perceptions make innovative behaviour more or less stressful, ' *Journal of Organizational Behaviour* ', 25, 201-215.
18. Jaiswal, Neeraj Kumar, and Rajib Lochan Dhar. (2015) "Transformational Leadership, Innovation Climate, Creative Self-Efficacy and Employee Creativity: A Multilevel Study." *International Journal of Hospitality Management* ', 51, pp. 30–41,
19. Jain, R. (2010). Innovation in organizations: A comprehensive conceptual framework for future research. ' *South Asian Journal of Management* ', 17(2), pp. 81-111.
20. Jong, J. D., & Hartog, D. D. (2010). Measuring Innovative Work Behaviour. *Creativity and Innovation Management*, 19(1), pp. 23–36

21. Kanter, R. (1988). When a thousand flowers bloom: Structural, collective and social conditions for innovation in organizations. *Research in Organizational Behaviour*, 10, pp. 169-211.
22. Kotter, John P., 1947-. (1999). *John P. Kotter on what leaders really do*. Boston :Harvard Business School Press,
23. Kremer, H., Villamor, I., & Aguinis, H. (2019). Innovation leadership: Best-practice recommendations for promoting employee creativity, voice, and knowledge sharing. *Business Horizons*, 62(1), pp. 65–74
24. Kim, J., Macduffie, J. P., & Pil, F. K. (2010). Employee voice and organisational performance: Team versus representative influence. *Human relations*, 63(3), pp. 372-394.
25. Morrison, Elizabeth. (2014). Employee Voice and Silence. *Annual Review of Organizational Psychology and Organizational Behaviour*. 1. pp. 173-197
26. Morrison, E. (2011). Employee Voice Behaviour: Integration and Directions for Future Research. *The Academy of Management Annals*. 5. pp. 373-412.
27. Morrison EW, Milliken FJ. 2000. Organizational silence: a barrier to change and development in a pluralistic world. *Acad. Manag. Rev.* 25:706–25
28. Miron-Spektor, E., Erez, M., & Naveh, E. (2011). The effect of conformist and attentive-to-detail members on team innovation: Reconciling the innovation paradox. *Academy of Management Journal*, 54, pp. 740-760.
29. Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of Management Journal*, 39, pp. 607-634.
30. Parker, S. K., & Collins, C. G. (2010). Taking stock: Integrating and differentiating multiple proactive behaviours. *Journal of Management*, 36(3), pp. 633-662.
31. Paulus, P. B. (2002). Different ponds for different fish: A contrasting perspective on team innovation. *Applied Psychology: An International Review*, 51, pp. 394-399.
32. Pretorius, M., Millard, S. M., & Kruger, M. E. (2005). Creativity, innovation and implementation: Management experience, venture size, life cycle stage, race and gender as moderators. *South African Journal of Business Management*, 36(4), pp. 55–68.
33. Rank, J., Pace, V. L., & Frese, M. (2004). Three avenues for future research on creativity, innovation, and initiative. *Applied Psychology: An International Review*, 53, pp. 518-528.
34. Siguaw, J.A., Simpson, P.M. and Enz, A.C. (2006), “Conceptualizing innovation orientation: a framework for study and integration of innovation research”, *Journal of Product Innovation Management*, 23 (6), pp. 556-574
35. Scott, S.G. and Bruce, R.A. (1994), “Determinants of innovative behaviour: a path model of individual innovation in the workplace”, *The Academy of Management Journal*, 37 (3), pp. 580-607.
36. Van Dyne, L. and Lepine, J.A. (1998), “Helping and voice extra-role behaviours: evidence of construct and predictive validity”, *Academy of Management Journal*, 41 (1), pp. 108-119
37. Wilkinson, A., Dundon, T., Donaghey, J., & Freeman, R. B. (2014). Employee voice: charting new terrain. *Handbook of Research on Employee Voice*, 3-16.
38. Wilkinson, A., Donaghey, J., Dundon, T., & Freeman, R. B. (2014). *Handbook of Research on Employee Voice: Elgar original reference*. Gloucestershire, England: Edward Elgar Publishing.
39. Wang, Z., Xu, S., Sun, Y., & Liu, Y. (2019). Transformational leadership and employee voice: An affective perspective, *Frontiers of Business Research in China*, 13 (2), pp. 1–14,
40. Xerri, M. (2012). Workplace relationships and the innovative behaviour of nursing employees: A social exchange perspective. *Asia Pacific Journal of Human Resources*, 51(1), pp. 103-123.

41. Yıldız, S., Baştürk, F., & Boz, I. T. (2014). The Effect of Leadership and Innovativeness on Business Performance. *Procedia - Social and Behavioural Sciences*, 150, pp. 785-793.
42. Zhang, Y., Huai, M., & Xie, Y. (2015). Paternalistic leadership and employee voice in China: A dual process model. *The Leadership Quarterly*, 26(1), pp. 25-36.

APPENDIX*Table 1: Demographics descriptive statistics*

Percentage% and Frequency of employee					
Gender					
Male	16	%40	Female	24	%60
Age					
25 – less than 30 years	21	%52.5	30 – less than 35 Years	12	%30
35 – less than 40 Years	6	%15	40 – less than 45 Years	1	%2.5
Education Level					
BSC	32	%80	High Diploma	4	%10
Master	4	%10	PHD	-	-
Position.					
Officer	18	%45	Senior	22	%55
Experience in the current position					
Less Than 4 years	20	%50	Between 4 to 6 Years	10	%25
Between 7 to 9 Years	6	%15	Between 10 to 12 Years	2	%5
13 Years and more	2	%5			
Total Experience					
Less Than 4 years	10	%25	Between 4 to 6 Years	5	%12.5
Between 7 to 9 Years	9	%22.5	Between 10 to 12 Years	14	%35
13 Years and more	2	%5			

Table 2: Demographics descriptive statistics

Frequency and Percentage% of manager					
Gender					
Male	21	%52.5	Female	19	%47.5
Age					
25 – less than 30 years	1	%2.5	30 – less than 35 Years	9	%22.5
35 – less than 40 Years	12	%30	40 – less than 45 Years	5	%12.5
45 – less than 50 Years	12	%30	50 and more	1	%2.5
Education Level					
BSC	23	%57.5	Master	15	%37.5
High Diploma	1	%2.5	PhD	1	%2.5
Position.					
Manager	28	%70	Supervisor	12	%30
Experience in the current position					
Less Than 4 years	12	%30	Between 4 to 6 Years	9	%22.5
Between 7 to 9 Years	13	%32.5	Between 10 to 12 Years	3	%7.5
13 Years and more	3	%7.5			
Total Experience					
Less Than 4 years	1	%2.5	Between 4 to 6 Years	0	0
Between 7 to 9 Years	7	%17.5	Between 10 to 12 Years	12	%30
13 Years and more	20	%50			

Table 5.1: Voice alignment

	group	N	Mean	Std. Deviation	Std. Error Mean
Voice alignment	Manger voice	40	4.1958	0.29451	0.04657
	Employee voice	40	4.2000	0.45323	0.07166

COMPARATIVE ANALYSIS OF GOVERNMENT REVENUE AND EXPENDITURES IN THE CASE OF THE FEDERAL GOVERNMENT OF ETHIOPIA

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ABSTRACT

In civilized societies taxation is one of the oldest activities, which has been playing a key role for thousands of years. Public expenditure in developing countries like Ethiopia plays an important role in the process of economic development. The general objective of the study was to make a Comparative analysis of government tax revenue and expenditure budget of the federal government of Ethiopia. To conduct the study both primary and secondary data were used. Primary data were collected from the ministry of finance and economic cooperation and the tax authority using questionnaire and interviews. The collected data were analyzed using SPSS 21 version. The findings show that the tax authority has limitations in using technologies to modernize the tax administration, poor the tax collection capacity. The Tax to GDP ratio of the country is low as compared to the sub-Saharan countries. There are different factors for the poor tax collection performance; weak enforcement and low tax audit coverage, and lack of strong cooperation with stakeholders. The government has weaknesses in the management public resources. The tax authority should use different Medias to create taxpayers awareness about tax, should strengthen its tax enforcement department to bring non taxpayers to the tax net.

Keywords: *Tax, Enforcement, Tax audit and expenditure*

1. INTRODUCTION

One of the oldest activities in human history is taxation, which has been playing a key role in civilized societies for thousands of years (James & Nobes, 2012, 2013; Lymer & Oats, 2013, 2014). Tax authorities levy taxes as a compulsory on income, expenditure, wealth or people, for which the individual tax payer directly or specifically received nothing in return. Scholars' attentions have been attracted by Government tax revenue performance for decades; On the other hand, there are still several debates on how to evaluate the tax revenue performance, the potential tax revenue, and how government units utilize the tax revenue potential to generate tax revenue (Bird, et al., 2006). Starting from the mid-20th century many scholars have tried to use econometric techniques. Governments are required to collect adequate domestic tax revenue to finance their expenditures to provide goods and services to their respected citizens. According to Thiru .K. (2013) Public expenditure in developing countries like Ethiopia plays an important role in the process of economic development. Public expenditure helps economic development by expanding economic infrastructure such as roads, power, food, shelter, health, education, employment opportunity, transport and other sectoral development. Further, it raises the standard of living of the people and supports social, economic and human development. It is the means through which recurrent and capital needs of the nations are addressed. The recurrent expenditure deals with the government expenditure spend on its primary day-to-day operation. The second form that public expenditure takes is capital expenditure which refers to investment outlays of the government aimed at increasing the country's capital stock (Stephen and Michael 2018).

2. RESEARCH PROBLEMS

The government of Ethiopia has the national vision of becoming a low middle-income country by 2025, to realize this vision the government set broad Growth and Transformation plan with a projected GDP of 11 - 15%. The state lead growth model of Ethiopian has achieved growth rates above the average for sub Saharan countries MOFED (2010). The proposed national growth and transformation plan is to improve the country's economy. The most important function of tax is raising revenue, which serve as the most important means for financing public goods such as public infrastructure and maintenance of law and order (OECD, 2014). To achieve this plan the government carried out many activities and registered remarkable achievements in real GDP growth, however, the performance has still fallen short of the targets set in the Plan. The tax to GDP ratio is low compared to the sub-Saharan countries and the expenditure management has also different shortfalls. Therefore, the purpose of this study was to investigate the main challenges that hinder the government achieving tax and expenditure management objectives.

3. LITERATURE REVIEW

3.1. Definitions taxes, benefits of taxes and public expenditures management

Taxes are confined to compulsory, unrequited payments to general government. Taxes are unreturned in the sense that benefits provided by government to taxpayers are not normally in proportion to their payments (OECD, 1996). A tax is a compulsory payment of money to pay to the Government by an Individuals or Organizations as the Government covers it's expenses on various public functions, and is interference in political, economic and society life without direct return of benefit to be derived by the taxpayer. In other words, there is no direct return to the taxpayer for what he pays; though public in general derives a common benefit. Thus, tax is a mandatory distribution collected by the Government to meet the expenses of various public functions. The principle of taxation should be to impose the least sacrifice on the people as a whole, even if it means imposing more sacrifice on some people and less on other. It is not a price paid by taxpayer for any definite service by Government. Modern Government, being welfare Government, should try to minimize the sacrifice of the community. Tax is major sources for a country's income which is used to develop the economy of nations as Cited in Zahraddeen (2019) Ahuj (2002) & somaye (2012). The government expenditure consists of expenses which a government incurs in protecting its citizens and increasing their economic and social welfare. A well-functioning revenue system is a necessary condition for strong, sustained and inclusive economic development. Revenue funds the public expenditure on physical, social and administrative infrastructure that enables businesses to start or expand. The revenue system is also a central element in supporting a strong citizen–state relationship that underpins effective, accountable and stable governments Michael. C (2015). According to Thiru .K. (2013) Public expenditure plays an important role in the process of economic development of developing countries like Ethiopia. Public expenditure helps economic development by expanding economic infrastructure such as roads, power, food, shelter, health, education, employment opportunity, transport and other sectoral development. Further, it raises the standard of living of the people and supports social, economic and human development. It is the means through which recurrent and capital needs of the nations are addressed. It usually takes the form of recurrent expenditure which deals with government expenditure outlays fundamental for its day-to-day running. The second form that public expenditure takes is capital expenditure which refers to investment outlays of the government aimed at increasing the country's capital stock (Stephen and Michael 2018). Public expenditure management (PEM) is an approach to public sector budgeting that is oriented towards realizing socially desired results. In particular, PEM raise the following question. What outcomes do we want to achieve through the budget and what procedures, rules, and processes do we need to put in place in order to

achieve these out-comes. PEM promotes three main functions i.e. allocative efficiency, aggregate fiscal discipline and operational efficiency.

4. OBJECTIVES

General objectives:

The general objective of the study is to make a Comparative analysis of government tax revenue and expenditure of the federal government of Ethiopia.

Specific objectives:

1. To evaluate the tax collection performance of the federal government;
2. To examine the extent of tax revenue contribute to expenditure budget in Ethiopia;
3. To assess the rate of tax revenue and expenditure increments.

Research questions:

1. How is the tax collection performance of the federal government;
2. What percentage of government expenditure is covered by domestic revenue;
3. How is the rate change of revenue and expenditures of the government.

5. METHODOLOGY

The research methods used for the study were mixed approaches; this method is used to address the problems of the study from different perspectives. Questionnaires and interview data collection instruments were used to collect primary data from the experts and officials of ministry of finance and cooperation and the tax authority, and secondary data were collected from sources.

6. RESULTS AND DISCUSSIONS

6.1. Pilot study

To determine the appropriateness and relevance of the questions in the instrument pilot test was performed. Test of content validity was performed which was measuring to the extent of the instrument provides adequate coverage, representativeness of the universe, specificity and clarity of the topic under study. The instrument was provided to three academicians and four practitioners who assessed each item thoroughly. The draft was also distributed and piloted on 20 experts of ministry of finance and economic cooperation.

6.2. Reliability Test

The researcher used reliability test analysis for the comparative analysis of tax revenue and government expenditure in the Ministry of Finance and Economic cooperation and tax authority using cronbach's alpha (α). The most wide and commonly used measure of internal consistency (reliability) is cronbach's alpha. The cronbach's alpha (α) of the scale used in the research is 0.85 which is far greater than 70 %.the scales with the coefficient alpha above 0.70 is good and acceptable this shows that there is high internal consistency and reliability in the questionnaire. As a result, the level of alpha was considered to be reliable enough to proceed with the data analysis.

7. RESPONSE RATE

The field survey result indicates that from 75 questionnaires were distributed to experts in Ministry of Finance and Economic Cooperation and Tax Authority 63 were returned representing 84 percent.

7.1. Demographic information of respondents

The following table shows information related to respondents age, gender, educational background, and experience of experts in MOFEC and the Tax Authority.

Table 1: Demographic Characteristics of respondents

Age	Frequency	Percent
<25	18	29
25-35	29	46
>35	16	25
Total	63	100
Experience in Years		
<3	13	20.6
3-6	17	27
6-10	19	30.2
>10	14	22.2
Total	63	100.0
Educational status		
Diploma	-	-
BA	38	60.3
MA& above	25	39.7
Total	63	100

Source: Compiled from questionnaires (2018)

Out of the 63 respondents 18(29%) are less than 25 years old, 29(46%) respondents' age range 25-35 years old and the remaining 16(25%) are above 35 years. In summary the majority of the experts' ages lie between 25 and 35 years which is a working age. The qualifications of the experts sample respondents. Accordingly, out of the respondents, 38(60.3%) of them have B.A Degree, 25(39.7 %) of the respondent has MA or MSC degree in different fields of study. Therefore the all the experts have BA and above educational background which enables to perform their duties and responsibilities. The experts experience in MOFEC shows that 13(20.6%) have less than 3 years, 17(27%) respondents have 3-6 years, 19(30.2%) of the experiences have 6-10 years, and the remaining 14(22.2%) have more than 10 years experience. The majority of the experts have above 3 years works experience which is helpful for the ministry to introduce new technology, system and process without difficulty.

Table following on the next page

Table 2: Responses on the government the tax collection potential

N o	Items/Statements	Responses										Total	
		SA		A		N		DA		SD			
		Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
1	The government applies modern technologies in the tax system	9	14	13	21	6	10	24	38	11	17	63	100
2	The tax authority works to bring non tax payers to the tax net to broad tax bases	3	5	19	30	9	14	18	29	14	22	63	100
3	There is smooth relationship and strong cooperation among the tax authority and stakeholders	11	17	15	24	5	8	27	43	5	8	63	100

Source: Compiled from Questionnaires (2018)

From the above table for the statement that the government applies modern technologies in the tax system 9 (14%) of the respondents strongly agreed, 13 (21%) agreed, 6(10%) are neutral 24 (38%) disagreed and 11 (17%) strongly disagreed. Therefore; significant number 35 (55%) of the respondents disagreed on the statement. The other question raised was whether the tax authority works hard to bring non tax payers to the tax net to broad tax bases; 3 (5%) respondents strongly disagree, 19 (30%) disagreed, 9 (14%) respondents are indifferent, 18 (29%) respondents disagreed and 14 (22%) respondents strongly disagreed with the statement, almost half of the respondents replied that the government needs to work hard to broaden the tax bases so that it can collect the domestic taxes. To triangulate the question an interview was held with MOFEC senior officials they said that tax reforms were made in the past few years; however, it was not effective as it was intended to be. They also mentioned that the reasons for the poor tax collection performances were; narrow tax bases, lack of awareness by taxpayers, unable to fully apply/use those new technologies which were introduced for the tax collection purpose and the tax audit coverage was low and was not able to investigate tax evasion and avoidances. The other reason that the interviewee stressed was that there are large number of non taxpayers in the country which adversely affects the government tax revenue. Third questions was the about the relationship and cooperation among the tax authority and stakeholders' their response was 11 (18%) of the respondents strongly agreed, 15(24%) agreed and 5(8%) of the respondents have reservation about the statement, 27 (43%) respondents disagreed and 5 (8%) strongly disagreed with the statement. Therefore more than half 32 (51%) of the respondents replied that there is no smooth and strong relationship between the tax authority and stakeholders' which is the most essential prerequisites of the tax collection performance.

Table following on the next page

Table 3: Percentage of Government Revenue to GDP Ratio

Indicators	2011	2012	2013	2014	2015	2016	2017	Average
Total government revenue and foreign aid	16.6	15.5	15.8	14.9	15.4	15.9	15	15.6
Total domestic revenue	13.4	13.8	14.3	13.8	14.4	15	14.3	14.1
Tax revenue	11.5	11.5	12.3	12.5	12.7	12.4	11.6	12.1
Direct taxes	3.8	3.9	4.2	4.4	4.6	4.7	4.5	4.3
Domestic indirect taxes	3.0	3.1	3.7	3.8	4.0	3.6	3.5	3.6
Import taxes	4.6	4.5	4.4	4.3	4.1	4.1	3.7	4.2
Non tax revenue	2.0	2.3	2.0	1.2	1.6	2.7	2.6	2.1
Foreign Aid	3.2	1.7	1.5	1.1	1.0	0.8	0.7	1.4

Source: MOFEC 2018

From the above table we can see the sources of domestic taxes and non taxes revenue shows slight increments for the first few years of GTP, however the rate of change is low as compared with plan. The government target was to increase the Tax to GDP ratio by the end of the GTP to be 17 percent however, the actual average Tax to GDP was 12.1. According to OECD (2019), the average Tax to GDP ratio of sub-Saharan countries is 17.2% and the non tax revenue is less than 5%. Whereas Ethiopia's average tax revenue to GDP and non tax revenue are 12.1% and 2.1% respectively, when we compare these ratios it is by far too low. To investigate the causes of the problems interview questions were raised to the officials of the MOFEC, their response shows that there are different factors which contributes for the low performance some of these are; there was political instability from 2016 to 2018 which results low GDP and tax collection, lack of commitments and cooperation among stakeholders and senior government officials in implementing the plan, the policies and administrative measures don not encourage taxpayers for the self assessment payment, weak government enforcement measures are some of the reasons for the poor tax collection performance.

Table 4: Questions related to the extent of tax revenue contribute to expenditure budget

No	Items/Statements	Responses										Total	
		SA		A		N		DA		SD			
		Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
1	The government expenditure budget is utilized in efficient and effective manner for the intended purpose	6	10	13	21	7	11	26	41	11	17	63	100
2	The government budget deficit is efficiently used for intended purpose	9	14	10	16	2	3	18	29	24	38	63	100
3	Governments officials are held accountable for the wastage of public resources investigated by auditors	5	8	9	14	3	5	29	46	17	27	63	100
4	Government fiscal policies are properly implemented	7	11	16	25	5	8	23	37	12	19	63	100

Source: Compiled from Questionnaires (2018)

From the above table for question whether the government expenditure budget is utilized in efficient and effective manner for the intended purpose 6(10%) of the respondents strongly disagree, 13(21%) respondents disagree and 7(11%) respondents are reserved to respond the question whereas 26(41%) respondents disagreed and 11(17%) respondents strongly disagreed with statement. Significant number 37(58%) of the respondents believe that the government budget utilization is not effective and efficient. As cited in HamadA. & Marwan A. (2018), John Maynard Keynes (1936) lay the foundations for the relationship between government spending and economic growth, as he believes that public expenditure stimulates output growth while internal financing can crowd out the private sector. Keynes argues that public spending stimulates economic development through its impact on consumption and investment demands. Question related with whether government deficit financing was properly utilized or not respondents 9(14%) strongly disagreed 10(16%) respondents disagreed and 2(3%) respondents are neutral and 18(29%) respondents disagreed and 24(38%) respondents strongly agreed. Majority 42(67%) respondents believed that the deficit financing didn't meet its objectives. The other question was whether Government's officials are held accountable for the wastage of public resources investigated by auditors; out of the 63 respondents 5(8%) responds strongly agreed, 9(14%) respondents disagreed and 3(5%) respondents are neutral and 26(49%) respondents disagreed and the remaining 17(27%) respondents strongly disagreed with the statement. Majority 43(76%) of the respondents believed that the objective of deficit financing was not met. Responses for the question whether Government fiscal policies are properly implemented or not; 7(11%) respondents strongly agreed, 16(25%) of the respondents disagreed and 5(8%) respondents are neutral and 23(37%) respondents disagreed and the remaining 12(19%) respondents strongly disagreed with the statement. Significant 35(56%) number of respondents believed the government policies are not properly implemented.

Table 5: Total government revenue and expenditure (in Billions birr)

Descriptions	2011	2012	2013	2014	2015	2016	2017	Average Change
Total expenditure budget	94	124	154	186	225	280.6	329.70	23.3
Current budget	40.7	51.4	62.7	78.1	107	136.7	176.6	27.8
Capital budget	53.3	73	91.3	107	118	144.2	153	19.6
Total government resource (TR+FA)	85.6	115.6	137.2	158.1	199.6	244.8	270.2	21.4
Total revenue (TTR+NTR)	69.1	102.8	124.1	146.2	186.6	231.8	257.7	25.1
Fiscal deficit	24.9	21.2	29.9	39.8	38.4	48.8	72	-1.8
Total tax revenue	59	85.7	107	133.1	165.3	190.5	210.2	24.1
Non tax revenue	10.1	17.1	17.1	13.1	21.3	41.3	47.6	36.2
Foreign aid	16.5	12.8	13.1	11.9	13	13	12.5	-4.0

Source: Compiled from MOFEC reports 2018

From the above table the government total expenditure is increasing on average at rate of a 23.3 whereas the total domestic revenue increases on average at a rate of 25.1 this shows the government tax non tax collection capacity is increasing however there is still in efficiency comparing to the sub Saharan countries. As shown above the government tax revenue was increased at an average of 24.1 and non tax revenue increases at 36.2 from this it can be concluded the non tax revenue increases at increasing rate as compare to the tax revenue. When we see the government expenditure budget data the current expenditure budget is increasing at an average of 27.8 while the capital budget increases at 19.6. The government of Ethiopia invests huge amount of capital in economic and social infrastructures like education, health, pure water supply, and road and poverty reduction projects. In the last few years fiscal deficit was increasing because more than 50% of government expenditure budget was allocated for capital/developmental programs MOFEC, (2018).

Ethiopia stands 5th foreign aid recipients' countries in world and the 1st in Africa from Development Assistance Committee members' countries OECD (2019). Foreign aid is an important source of finance for developing countries however; high dependence on foreign aid has short falls especially during political and economic crisis in DAC countries. From the above data Ethiopia's foreign aid is decreasing at average rate of 4 percent from time to time.

8. CONCLUSION AND RECOMMENDATION

8.1. Conclusions

The government invested huge amount money to modernize the tax administration and implemented tax reforms to improve its tax collection capacity in the last few years; nevertheless, it cannot collect adequate domestic tax revenue to finance its developmental needs. The findings show that there are progresses in the tax collection trend as compared to the past trend; however, it is still low when compared to the sub-Saharan countries. The reasons for the poor tax collection performance were weakness in using new technologies to its full capacity in the collection process, lack of awareness by taxpayers; weak enforcement and low tax audit coverage. In addition there is weak cooperation between the tax authority and stakeholders' which adversely affects the government tax revenue. Regarding the government expenditure management system the findings show that there are weaknesses in using government expenditure budget effectively and efficiently for the intended purpose. On the other hand Weakness by the government to held accountable government officials for the wastage of public resources investigated by auditors. Ethiopia receives significant amount of the foreign aid from DAC to cover its expenditure budget. Concerning the fiscal policies the findings show that the country fiscal policy stabilized the macroeconomic and accelerate its growth.

8.2. Recommendation

The government should introduce new modern technologies in the tax administration, and design system to control its proper implementations. The tax authority should use different Medias to create awareness about tax know how by the taxpayers. In addition, the tax authority should strengthen its tax enforcement department to bring non taxpayers to the tax net and increases it tax audit coverage to collect adequate taxes to cover its expenditure budget. On the other hand the tax authority should create smooth relationship and cooperation with stakeholders. The government should improve its expenditure management so that resources can be used for the intended purpose. The other issue which the government must work is to hold accountable public officials for the wastage of resource investigated by auditors. Finally the government should reduce it dependency on foreign aid to cover its expenditure budget.

LITERATURE:

1. Ames, S., & Nobes, C. (2012). The economics of taxation: principles, policy and practice. (12th Edition 2012/13): Birmingham: Fiscal Publications.
2. Bird, R. M., Martinez-Vazquez, J., & Torgler, B. (2006). Societal institutions and tax effort in developing countries.
3. Hamad A. and Marwan .A (2018) .The Impact of Deficit Financing on Economic Stability: The Case of Jordan retrieved on June 24, 2020 <https://doi.org/10.32910/ep.70.5.2>
4. J. Aim, & J. Martinz-Vazquez (Eds.), The Challenges of Tax Reform in a Global Economy (pp.283 – 336). US:Springer-Verlag.
5. Lymer, A., & Oats, L. (2013). Taxation: Policy and Practice. (20st ed., 2013/2014) Birmingham: Fiscal Publications.
6. Michael Carnahan (2015): Taxation Challenges in Developing Countries

7. MOFEC (2018).Federal Democratic Republic of Ethiopia: ministry of finance and economic cooperation. Retrieved on March 20-2020 from <http://www.mofed.gov.et/>
Retrieved on May 21,2020<https://onlinelibrary.wiley.com/doi/epdf/10.1002/app5.70>
8. NPC (2016) Growth and Transformation Plan II (GTP II)(2015/16-2019/20)Volume I
Retrieved on June 15,2020 from <https://www.greengrowthknowledge.org/sites/default/files/downloads/policy-database/ETHIOPIA%20Growth%20and%20Transformation%20Plan%20II%2C%20Vol%20I.%20%20%282015%2C16-2019%2C20%29.pdf>
9. OECD (2014). Addressing The Tax Challenges of the Digital Economy Retrieved on June 18, 2020 [https://www.oecd-ilibrary.org/docserver/9789264218789-5-en.pdf? expires=1592854094&id=id&accname=guest&checksum=E4A1440E0849BDED109AE68911C46AC0](https://www.oecd-ilibrary.org/docserver/9789264218789-5-en.pdf?expires=1592854094&id=id&accname=guest&checksum=E4A1440E0849BDED109AE68911C46AC0)
10. OECD(2019), Revenue Statistics in Africa 2019 retrieved on June 24, 2020 from <https://www.oecd.org/tax/tax-policy/brochure-revenue-statistics-africa.pdf>
11. OECD(2017): DEVELOPMENT AID AT A GLANCESTATISTICS BY REGION
retrieved on June 24, 2020 <https://www.oecd.org/dac/financing-sustainable-development/development-finance-data/Africa-Development-Aid-at-a-Glance-2019.pdf>
12. Thiru. K. (2013). Public Expenditure and Economic Development in Indian States:
Unpublished doctoral dissertation, University of Madras Department of Economics, India.
13. Zahradden. A. (2019) An Analysis of the Relationship between Tax Revenue and Public
Expenditure in Nigeria Retrieved on June 18, 2020 from <https://www.grin.com/document/506980>

METHODS OF BUSINESS RISK ANALYSIS IN THE PROCESS OF MANAGING BUSINESS OPERATIONS OF MULTINATIONAL COMPANIES

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ABSTRACT

Multinational companies (MNCs) have become a relevant and influential factor for the achievement of competitive advantage on the global market. They expand their operations outside their home countries. The assessment of the role and importance of modern MNCs in the world economy implies a good understanding of all their forms and functioning of the global market. The risks MNCs are facing in their business, in addition to the usual business risks in foreign trade, are currency, transport, insurance, credit risks. They are additionally exposed to the risks of the resident country, which include political, corruption, criminal, or war risks. Although risk is an integral part of business operations, one should know how to manage it by making informed decisions based on modern analyses of quality data. The hypothesis in this paper is that knowledge of different qualitative and quantitative risk analysis methods makes it possible to determine the vulnerability of the system due to the existence of business risks. Practical examples from the operations of the selected MNC on the global market will be considered using statistical correlation methods and trend analysis. The analysis will cover business risks MNCs are facing as well as business risk management methods appropriate for their identification and elimination. Statistical software IBM SPSS Statistics 24 and MS Excel will be used for the analysis and presentation of results.

Keywords: *Multinational companies, Business risks, Methods for analysing business risks, Energy sector*

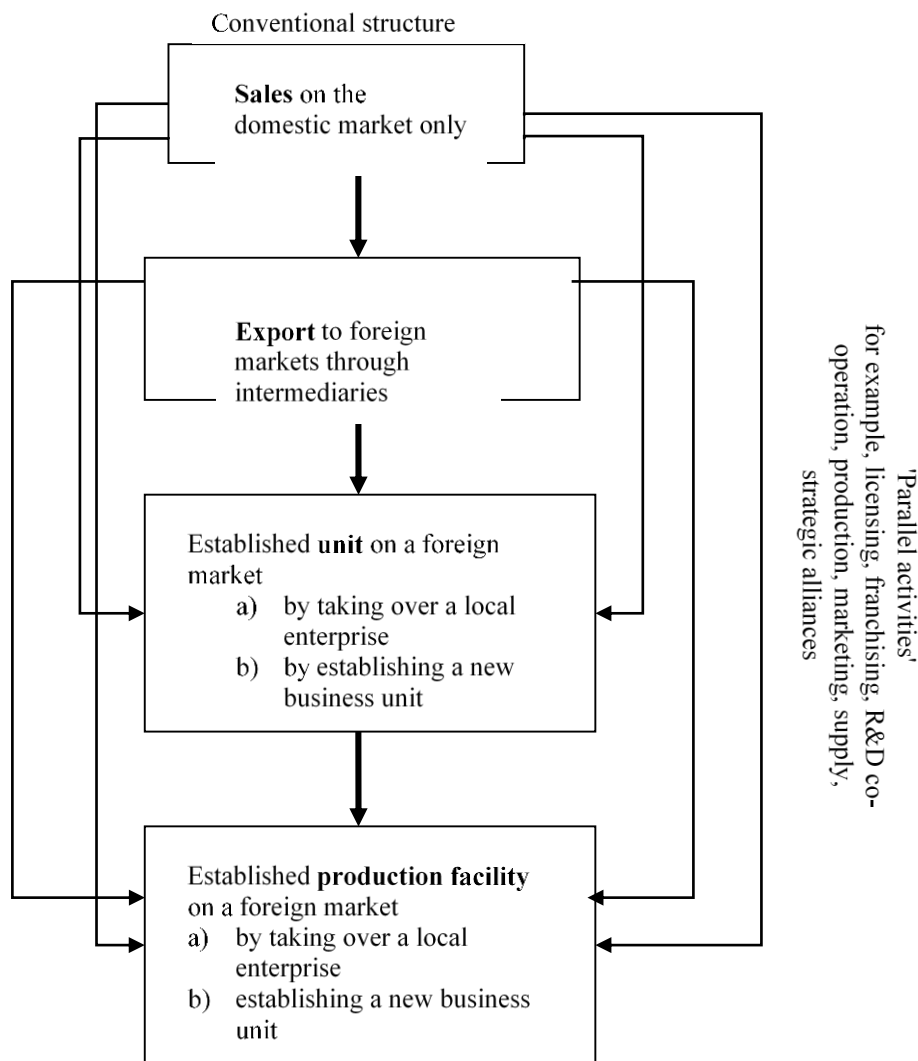
1. THEORETICAL CHARACTERISTICS OF THE ORIGIN AND DEVELOPMENT OF MULTINATIONAL COMPANIES (MNCs)

Multinational company denotes the term for companies operating in two or more countries interconnected by joint ownership or management. The terms multinational company (hereinafter referred to as MNC) and transnational company (TNC) are commonly used as synonyms although many authors, and even organisations such as UNCTAD, readily point to significant differences between these terms. As an argument in favour of this claim, they state that multinational corporations have static affiliates and companies in different countries, while transnational corporations cross borders, obstacles, rise above them, and live globally, and their financial headquarters are offshore in order to avoid taxes. Unlike multinational companies where everything is managed from their headquarters (design of projects, drafts, plans according to which all the affiliations in other countries operate), in transnational corporations, only top management is mostly transnational, and the available capital and strategies are somewhat centralised, but everything else is conducted in affiliates around the world that enjoy

a great degree of independence (Crkvenac, 1995, 127). Since the 20th century, many authors have sought to define these companies. Navaretti and Venables (2004, 4) write that multinational companies are companies owning a significant share of stocks (usually 50% or more) of another company operating in another country. According to these authors, these companies also include huge companies such as IBM, Intel, General Motors, and Nike, as well as small companies such as shoe manufacturer Calzaturificio Carmens, which employs a total of 250 workers in Padua (Italy) and Vranje (Serbia). Navaretti and Venables also write: "Multinational companies are relatively large, have competitive strength in the market and negotiating power when defining policies, especially in small developing countries. They are global players that can circumvent national laws and policies much easier than domestic firms. "Jones (2005, 6) defines multinational companies as companies operating in more than one country and notes that they are one of the key holders of investment flows, trade and knowledge across national borders. Interest in multinational companies rose sharply at the end of the 20th century. In the 1980s, 25% of all transactions taking place in the world took place within MNCs. In recent years, the importance of MNCs and the expansion of international production has increased to 40% through the transition to the new millennium (Dabić, 2007, 32). Their permanent goal is expansion and economic growth. Expansion of activities of MNCs is based on (Dabić, 2007, 33): 1) richness in capital with substantial self-financing, 2) technological superiority, 3) marketing superiority, 4) inclination towards risky and unsafe operations, and 5) adaptability to political, economic, and technological changes. It is indicative that large MNCs open their affiliates in the world, but over time the affiliates become independent and grow into independent large companies. Giant companies do not suffer competition and, if they face it, they prefer to set up joint ventures (Porter, 2008, 295). Modern MNCs are organised as business systems in which owners only have limited responsibility for the obligations the company assumes considering the separation of ownership functions from the functions of resource administration in the company. The basic mission of MNCs is to create wealth for key interest and influence groups in a responsible and socially acceptable manner. Corporations strive to fulfill their economic purpose under the motto (Stainer, A. & Stainer, L., 1998, 5): ethics, accountability, and profitability.

Figure following on the next page

Figure 1: Development of the organisational structure of multinational companies



Source: Dicken, P., (2007) Global Shift: Reshaping The Global Economic Map in The 21st Century. London: Sage Publications., p. 116.

Figure 1 represents a general model and shows the possibilities available to the company in the process of internationalisation of production. However, many companies never become multinational, and some skip certain developmental phases shown in the figure. Swiss company Nestle had its own production abroad five months after its establishment (Dicken, 2007, 112), which reflects this country's business philosophy to start local production of products intended for export as soon as possible. Most of the significant modern MNCs combine different ownership and non-ownership forms of presence in foreign markets, and by moving to the next phase in one country, the company often expands its presence in another country using methods from the previous phase. The 2018 report estimates that there are more than 77,000 MNCs and that they had about 770,000 affiliates abroad in almost every country in the world. They generated USD 4.5 trillion of value added, employed 62 million workers and exported goods and services worth USD 4 trillion (UNCTAD, 2019, 5). This is dominated by 100 largest non-financial MNCs. In the year 2000 they participated with more than half of the total sales of affiliates abroad and employed more than half of all workers (UNCTAD, 2019, 5). Production controlled by MNCs accounts for more than 1/4 of world production, and they control 1/3 of world trade.

Namely, globalisation and the related open market increase competitive pressures on both small and large enterprises. Under this pressure, MNCs have moved and are moving parts of their production to countries where production factors are cheaper and/or more accessible. Having noticed the advantages gained by MNCs for this particular reason, many national companies are trying to do the same. Therefore, internationalisation of production increases competitive pressure on internationalisation of production (Brooks, 2005, 28). In the past few centuries, the fundamental creators of wealth in market economies have moved from natural resources (land, labour) to movable and immovable property (buildings, plants, money) and then to intangible assets, i.e. knowledge and information. While 80% of value added in the processing industry of the USA in the 1950s were primary or processed food products, materials, and mineral products, and 20% knowledge, by 1995 this relationship changed to 70% knowledge and 30% everything else. Consequently, the value of tangible assets of companies has become a factor of lesser significance in their market value. At the end of the last century, the relationship between intellectual value and physical and financial capital in most companies was estimated from 5:1 to as much as 16:1 (Dunning, 2002, 9). MNCs tend to become significant in industries with four characteristics (Dunning, 2002, 10): high level of R&D in relation to sales; high percentage of highly skilled and technically educated employees in the total number of employees; in productions that are new and/or at a high technical level or in productions where there is a large differentiation of products and a lot of advertising.

1.1. Influence of MNCs on politics and the economy

The largest number of MNCs originates from the USA, Japan, and the European Union, i.e. more than 70% of the 500 largest multinational companies in the world. However, the largest number of MNCs is based in the USA (Table 1), followed by China, Japan, and the EU Member States – the Netherlands, Germany, and Great Britain. The most represented industry among the largest MNCs is oil, followed by automotive, power, and financial industry. An interesting fact is that, although the above-mentioned industries are numerous, none of them ranks first in terms of size. Walmart retail chain of supermarkets ranks first; it has for several consecutive years ranked first on the list of the 500 largest MNCs and has been on the same list for 22 years. The size and strength of the world's largest companies is evident from the size of their total income, the number of employees, and asset size. Total revenues of these companies often exceed the GDP of many countries. For example, Walmart would be among the 25 largest countries in the world. The following table clearly shows the dynamics of economic power trends of the most significant MNCs.

Table 1: The largest MNCs in terms of total revenue in 1999 and 2019.

Rank	Year 1999	Total revenue (mil. USD)	Year 2019	Total revenue (mil. USD)
1.	General Motors	189	Walmart!	514
2.	Walmart!	166	Sinopec Group	414
3.	Exxon Mobil	163	Royal Dutch Shell	396
4.	Ford Motor	162	China National Petroleum	392
5.	General Electric	111	State Grid	387
6.	Intl. Business Machines	87	Saudi Aramco	355
7.	Citigroup	82	BP	303
8.	AT&T	62	Exxon Mobil	290
9.	Altria Group	61	Volkswagen	278
10.	Boeing	57	Toyota Motor	272

Source: According to Fortune Global 500 available at: <http://beta.fortune.com/global500>, (28/03/2020)

Table 1 shows the ten largest MNCs and their total revenue in 1999 and 2019. It is evident that some companies managed to keep their place on the list of the ten largest for almost two decades, which indicates their strength and size. The above table shows an increase in total revenue during the observed period, which shows that the total income of Exxon MNC increased by 56% while Walmart's income almost tripled. As shown in the table, an insight is given into the total income of individual MNCs, which can indicate that, the larger and more successful MNCs, the greater their influence on the countries with which and in which they operate. In addition, they have a major impact on price fluctuations, such as energy sources and products, managing the quantity they release on the market. For example, the announcements about new gas or oil sites trigger changes in the prices of energy products, as well as all related products on international stock markets. Despite severe sanctions imposed by regulators, MNCs resort to monopolies on the market, and by means of transfer pricing they often also avoid tax, i.e. tax payments in countries that are "more suitable".

2. METHODS OF BUSINESS RISK ANALYSIS

Business risks are a part of company management and are in a causal relationship with business decisions. Namely, every business decision contains elements of uncertainty in its stability and a dose of scepticism regarding its success. Since managers make business decisions on daily basis, risky business is an everyday phenomenon. Not long ago, former managers who did not have sophisticated risk management tools at their disposal relied on experience and intuition that separated them from the environment and, if they succeeded, they were admired by their peers. The success of these hazards was witnessed by very few MNCs that existed until the mid-20th century. Only with the development of economic sciences in the second half of the 20th century, which started to base corporate governance on scientific grounds, and with the acceptance of the risk theory from technical sciences, were the preconditions for effective management of business risks created. Risk analysis is an important segment of business risk management that addresses identified risks by checking the existing controls in the system, choosing the best protection method, and assessing the justification for introducing additional activities. Risk analysis is a process of grouping, filtering, sorting risk factors according to their direction and intensity of action. The analysis recognises the vulnerability of the system to impacts from the internal or external environment. It allows early identification of potential threats, assessment of the scope of a possible consequence, and choosing adequate protection. Two basic approaches to business risk analysis are qualitative and quantitative, which are considered in more detail below.

2.1. Qualitative risk analysis

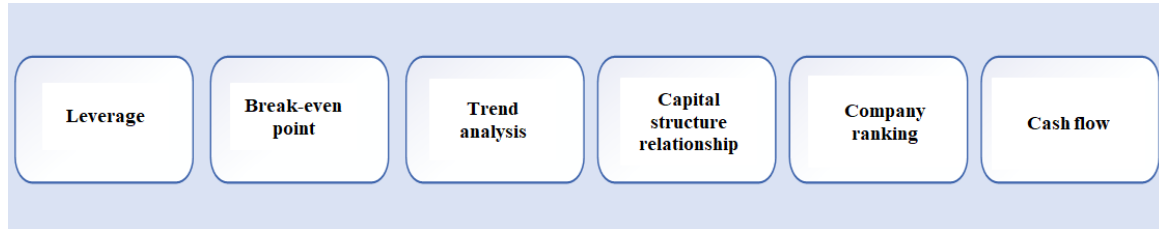
Qualitative risk assessment methods, as pointed out by Andrijanić, Gregurek, and Merkaš (2016, 163), enable systematic examination of assets, threats, and vulnerabilities, thus determining the likelihood of the appearance of threats, the amount of costs if they occur and the value of protective measures designed to reduce threats and vulnerabilities to an acceptable level. To perform a qualitative analysis, it is not necessary to know the material value of certain resources exactly; it is more important for their evaluation to know their significance for certain business processes they are used in. The aim of qualitative assessment is to subjectively rank risk elements. The assessment of the probability and impact of risks is the basis for ranking the company risks and possibilities. Risk probability is the possibility of occurrence of a risky event, while risk impact is the effect of the risky event on the company's objectives.

2.2. Quantitative risk analysis

Business risk is an inevitable uncertainty in the company's physical operations. Its impact is expressed by the variability in the company's earnings before interest and taxes (EBIT).

EBIT is the key financial relationship calculated in practice based on companies' accounting data. In addition to this indicator, a series of financial relationships is calculated from the accounting data. There are several commonly used risk analysis methods, as shown in Figure 2.

Figure 2: Financial risk analysis method

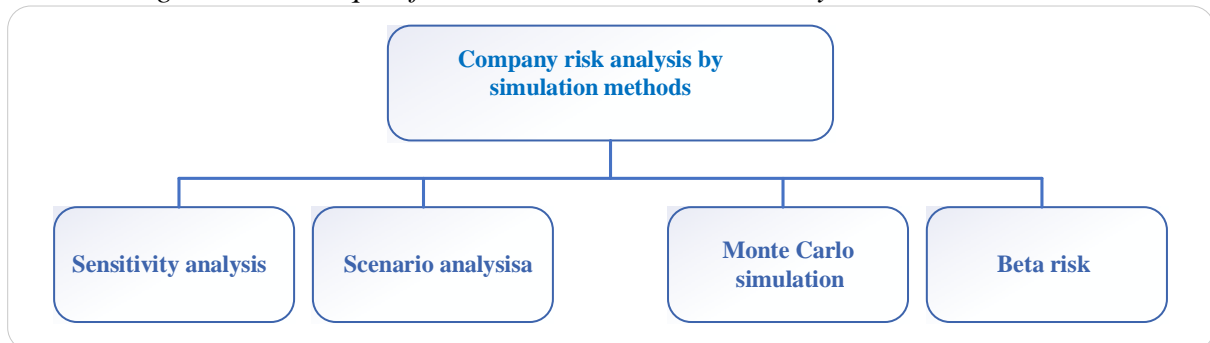


Source: According to Andrijanić, Gregurek and Merkaš, Upravljanje poslovnim rizicima, 2016, p. 170.

- Leverage – the force used at one point is converted into a greater force at another point;
- Break-even point – EBIT – EPS profit calculation, financing alternatives by loans, recapitalisation, etc;
- Trend analysis – comparison of relations between past and future relationships, relation in time;
- Structure relationship – in relation to other companies with similar business risks. If the structure deviates, the company is suspicious;
- Company ranking – by credit agencies;
- Cash flow – for debt levels per structure. A company can have a debt and cash flow for debt, so the statistical analysis may be deceiving (the relationship between FCF and cash flow).

Since business risk denotes a danger, loss, or possibility of failure, which may have undesirable consequences regardless of its origin, managers avoid it, because punishment for potential error is grave, whether it is loss of money, reputation, or job security. Business risk can also be considered as a decision-making situation in which the decision-maker is familiar with problem-solving possibilities and can determine the probability of each possibility based on available information. Techniques commonly used to analyse individual company risks are shown in the following figure.

Figure 3: Techniques for individual risk assessment by simulation methods



Source: According to Andrijanić, Gregurek and Merkaš, Upravljanje poslovnim rizicima, 2016, p. 171.

Simulation is an active learning method that mimics the functioning of a real object, process or system regarding the time flow through a model, situation or apparatus in order to obtain the necessary information or train the staff. The simulation method principle implies (Cetinski, Perić, & Jovanović, 2008, 4): 1) description of original functions, 2) creation of a simulation model, 3) simulation, and 4) analysis and comparison of the obtained results with the original.

2.2.1. Sensitivity analysis

It is quite certain that changes in variables (such as sold units or sales prices) will cause changes in the net present value. Sensitivity analysis measures the percentage of change in net present value (NPV)¹ resulting from a certain percentage of change in input if other variables remain in the expected values. This is the most frequently used technique for assessing individual risk in most companies. It begins with the base situation, where net present value is calculated using the fundamental value case when entering each variable size. The following variables are used in the calculation:

- Costs of equipment;
- Necessary current assets;
- Unit product sale;
- Sale price;
- Variable costs per unit;
- Fixed costs;
- Tax rate;
- Cost of capital.

The sensitivity analysis itself should provide reliable information on company business taking into account these input variables. Each variable increases or decreases at the expected value, assuming that other variables are constant at their base levels. NPV is then calculated using the change in input value. Finally, this will result in a set of NPVs and a corresponding graphical overview of how sensitive the NPV is to the change in each variable. The increase in variable costs, fixed costs and equipment costs reduces the NPV of the project. According to (Andrijanić, Gregurek, & Merkaš, 2016, 186), NPV is very sensitive to changes in sales prices, quite sensitive to changes in variable costs, slightly less sensitive to the decline in sold units and fixed costs, but not very sensitive to changes in equipment. Sensitivity analysis is usually performed when analysing project risks.

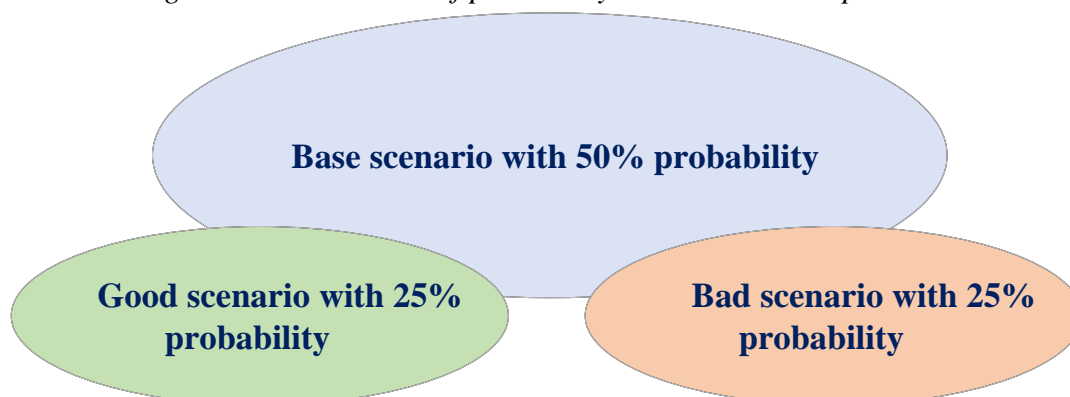
2.2.2. Scenario analysis

In contrast to the previously elaborated sensitivity analysis method in which one variable is modified, scenario analysis enables more than one variable to be changed simultaneously, which includes the probabilities of changes in key variables. The principle of scenario analysis uses the basic scenario that implies the use of the most probable input values. Worst-case scenario (low sale prices, high variable costs) and best-case scenario (high sales prices, low variable costs) are determined according to data obtained from different services within the company. As presented in the following picture, best and worst cases are defined with probability of deviation to 25% better or worse, with 50% probability for base scenario conditions.

Figure following on the next page

¹Net present value (NPV) is the difference between the market value of an investment and its costs.

Figure 4: Presentation of probability in relation to the possible scenario



Source: According to Andrijanić, Gregurek and Merkaš, *Upravljanje poslovnim rizicima*, 2016, p. 171.

The baseline case results are the same in sensitivity analysis and event scenario analysis, but in the event scenario analysis the worst case is much worse than in sensitivity analysis, and the best case is much better than in sensitivity analysis. Therefore, in the event scenario analysis all variables are set at their best or worst levels, while in sensitivity analysis only one variable is adjusted, while other variables are at their core, i.e. basic level.

2.2.3. Monte Carlo simulation

Monte Carlo simulation is a more sophisticated version of scenario analysis. This technique consists of generating random numbers for each distribution that represent input variables and the consecutive application of the basic model for calculating output variables. Thus, the probabilities for input variable values are reflected in the dissemination of results. Monte Carlo is a system of mathematical models and algorithms whose main feature is the use of random numbers in solving various problems. These are usually mathematical problems the solutions of which cannot be determined analytically, or for which there are no efficient numerical algorithms. The complexity of the Monte Carlo simulation, which until recently had been the privilege of experts, was simplified by the available statistical and mathematical software which made it user-friendly also for managers with no expert knowledge in statistics and mathematics.

2.2.4. Beta risk

The fact that all the analysed business risk analysis techniques have in common is that they deal with individual company risks.

They provide useful information about particular project risks, but do not view the project in correlation with other company projects, which is extremely important for large MNCs. A beta indicator of a particular stock indicates stock volatility, i.e. its price or, in simpler terms, variability in relation to the market. Beta indicator for the market as a whole has a value of 1, and beta for a particular stock is compared with the beta of the market, i.e., the stock exchange index, thus determining the degree of volatility, i.e., the degree of oscillation of stock prices. It can be synthesized that there are numerous approaches to business risk analysis of companies. The approach the analysts will apply depends on the availability and credibility of the data analysed. However, they all seek to determine to what extent the unreliability of input variables affects the result.

2.2.5. Value at risk – VaR

Value at risk (VaR) is a “measure of the maximum expected loss that may occur over a certain period of time under normal market conditions with a certain level of reliability” (Sprčić, 2013,

109). VaR is a unique, summarised statistical measure of maximum possible changes in the portfolio value of financial instruments with a probability of x% over a given evaluation period. This potential loss in the portfolio value of a financial institution is compared with the available capital and money reserves to ensure the coverage of potential losses without risk to the financial security and stability of the institution itself. The users of the VaR method are primarily banks with large trade portfolios, which were the first to initiate risk management activities in order to meet regulatory requirements. Regulators use this measure because the business solvency regulation sector of financial institutions requires maintaining a minimum level of capital associated with exposure to financial risks. MNCs also use the VaR when measuring and managing financial risks. Three components are important for the calculation of the VaR measure (Sprčić, 2013, 110): 1) level of reliability, 2) period of time, and 3) value of assets. VaR enables the management of a MNC to recognise a risk situation of the entire company from a single information and to actively control it.

2.2.6. Stress testing

The VaR measure evaluates potential losses over a certain period under normal market conditions but does not provide an estimate of potential company losses resulting from market failure. Other risk measurement methods are used for these emergencies, such as testing extreme events or stress testing and scenario analysis. According to Sprčić (2013, 117), stress testing can be described as a process for identifying and managing circumstances that cause extraordinary losses. When testing extreme events, major changes in risk factors are simulated and the value of portfolios and possible losses is estimated at each risk factor change. The purpose of stress testing is to establish a clear risk measure that can easily be understood. Stress testing is an important component of the risk management system as it may help ensure the survival of companies in times of severe market turmoil. The occurrence of market illiquidity should be considered in stress testing. Due to market illiquidity, it is highly likely that companies will not be able to make transactions at reasonable prices or to close their open position at all. There is no standard way of conducting stress tests, nor is there a standard set of extreme market scenarios observed. The stress test procedure depends exclusively on the assessment and experience of risk managers. Provided that they were chosen carefully, recognising extreme market developments, VaR and the stress test method together are very good measures for the assessment of a risk situation.

2.3. Business risk analysis by the AHP method

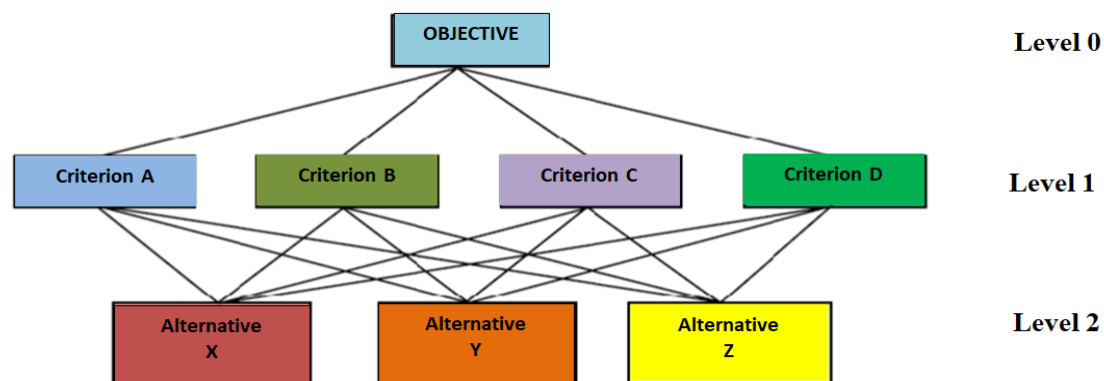
Depending on the estimation of business risk intensity and direction, risk management methods have been developed.

One of the most commonly used risk analysis methods is closely related to the decision-making analysis – it is the multi-criteria analysis of the hierarchy process known as the Analytic Hierarchy Process (AHP) method. The method is used when (Saaty, 2008, 85): “the choice of one of the available alternatives or their ranking is based on several criteria of different importance and expressed by different scales.” The risks encountered by MNCs in their business operations can be identified as:

- Human resource management risks;
- Risks of changes in production input costs;
- Risks of environmental pollution;
- Innovation risks;
- Currency risks;
- Technological risks.

Risk recognition criteria are defined next and appropriate alternatives are set (Miletić, Bogdanović, Mihajlović, & Krstić, 2018, 44). The AHP method starts from decomposition of a complex problem in a decision-making process into a multi-dimensional hierarchy structure, goals, alternatives, and criteria. As a quantitative method, AHP evaluates the impact of criteria, then compares alternatives to each individual criterion and finally ranks alternatives, thus obtaining a final result. Saaty's score scale from 1 to 9 is used to determine the impact of criteria and alternatives, where the highest score denotes "absolute dominance".

Figure 5: Hierarchy structure of the AHP method



Source: According to Saaty, *Decision making with the analytic hierarchy process*, 2008.

The evaluation of criteria and alternatives is a complex and mathematically demanding procedure due to a large number of matrices. Namely, the higher the number of identified risks, the higher the number of criteria and thus the possible alternatives. All the mentioned methods of business risk analysis are only a case-by-case pattern of risk management behaviour. The analysis is important because the results of the analysis of a single event may be a useful source of information for application to another similar event.

3. ANALYSIS OF THE DYNAMICS OF TRENDS IN PUBLISHED RISK ANALYSES OF MNCS IN THE ENERGY SECTOR – THE MOL GROUP HUNGARY MODEL

For the purpose of scientific value of the paper, the authors have extended their empirical research of trend dynamics in published analyses of the selected company whose operations in the energy sector are characterised by the classical production of energy products from underground gas and oil reservoirs on Eurasian soil. At the same time, they selected the model of an MNC that is the main supplier of gas and oil for the EU.

The paper also presents relevant graphic analyses of trending forecasts within certain limits and regression analysis of variance or standardised beta coefficient. Therefore, the example of the Mol Group Hungary is analysed below.

3.1. Mol Group Hungary

The MOL Group is a Hungarian multinational oil and gas company with headquarters in Budapest, Hungary. Among others, members of MOL Group include Croatian and Slovakian state-owned oil and gas companies INA and Slovnaft.

Figure following on the next page

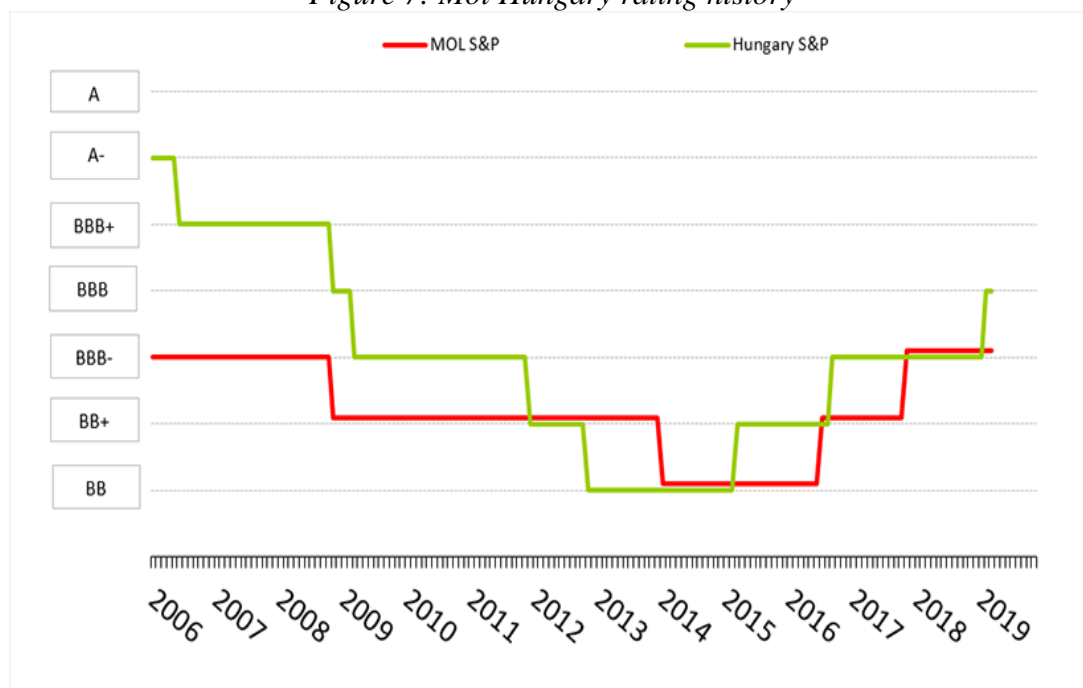
Figure 6: Dynamics of MOL Group stock trading on the Budapest Stock Exchange from 2014 to the beginning of 2020



Source: MarketsInsider,
https://markets.businessinsider.com/stocks/mol_hungarian_oil_and_gas_a-stock reviewed
 25/03/2020

MOL is a traditional company for the exploration of oil and gas from underground sources. It is positioned in Central Europe that is rich in natural gas and oil sites. It continued its steady growth after 2017 and successfully resists announcements about the transition to alternative energy sources. Rating trends of MOL and Hungary according to S&P are presented in the following figure.

Figure 7: Mol Hungary rating history



Source: MOL Group, <https://molgroupcareers.info/en/investor-relations/bond-and-credit-rating/credit-rating> reviewed 25/03/2020

The link between the reached prices of stock values on the stock exchange and rating scores is presented in the following table.

Table 2: The history of changes in stock value and rating of Mol Hungary (4Q2014 - 4Q2019)

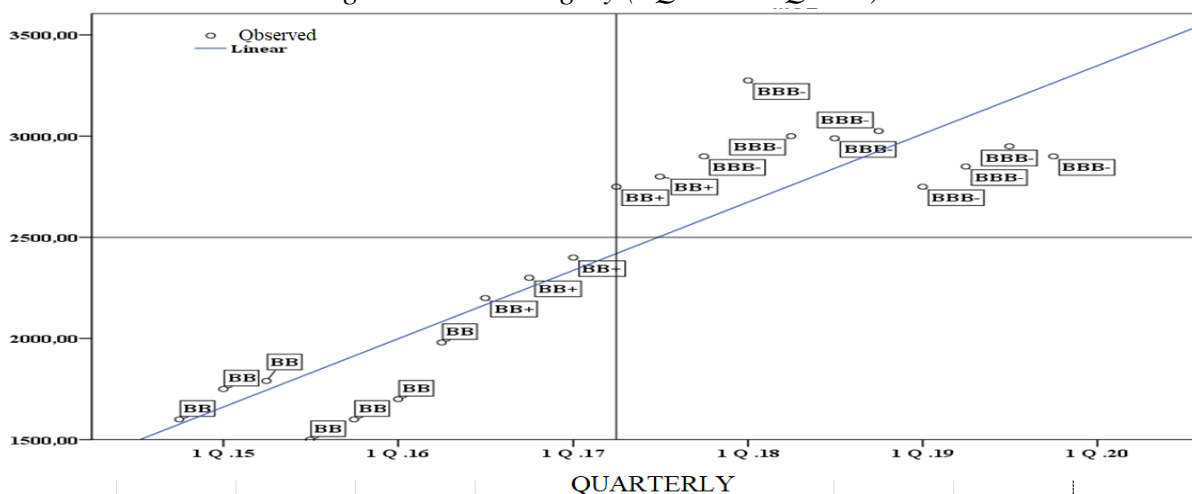
QUARTER	STOCKS	RATING
4 Q 14	1600	BB
1 Q 15	1750	BB
2 Q 15	1790	BB
3 Q 15	1500	BB
4 Q 15	1600	BB
1 Q 16	1700	BB
2 Q 16	1980	BB
3 Q 16	2200	BB +
4 Q 16	2300	BB +
1 Q 17	2400	BB +
2 Q 17	2750	BB +
3 Q 17	2800	BB +
4 Q 17	2900	BBB -
1 Q 18	3275	BBB -
2 Q 18	3000	BBB -
3 Q 18	2989	BBB -
4 Q 18	3025	BBB -
1 Q 19	2750	BBB -
2 Q 19	2850	BBB -
3 Q 19	2950	BBB -
4 Q 19	2900	BBB -

* The S&P agency rating is published periodically per year

Source: Authors' calculation according to: Markets Business Insider,
https://markets.businessinsider.com/stocks/rosneft_stoc

If stock trading is an indicator of a company's strength on the market, then it is concluded that MOL is a successful company on the oil and gas exploitation market, which is confirmed by agency ratings. By analysing the dynamics of changes in the average stock value and the rating they had in the observed time series (expressed in quarters), it is possible to draw conclusions about their causal relationship as well as to predict the continuation of trends for the forthcoming period of time. Regression analysis of data from Table 2 is presented in the following scatter diagram and the table of variance analysis.

Figure 8: Mol Hungary (4Q2014 - 4Q2019)



Source: Authors' processing in IBM SPSS Statistics 24 based on data from Table 2

Figure 8 shows significant scattering in the second and fourth quadrants. The results of the conducted variance analysis are presented in the following table.

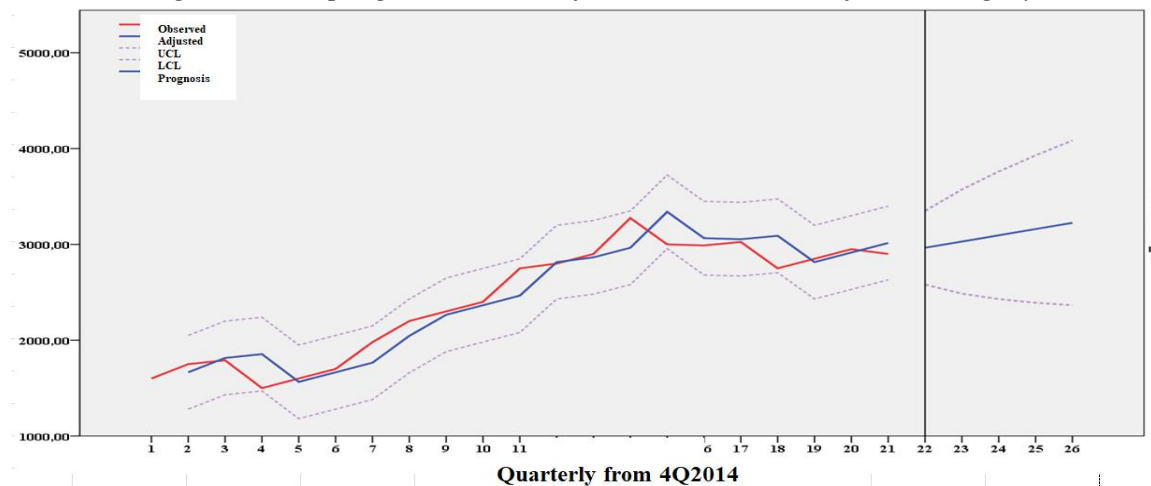
Table 3: Variance analysis Mol Hungary (4Q2014 - 4Q2019)

	Sum of squares	df	R ²	β	F	Sig.	F limit
Regression	5476924	1	0.799	0.894	75.430	0.001	8.19
Residual	1379585	19					

Source: Authors' processing in IBM SPSS Statistics – in 24 according to data from Table 2

The ANOVA table indicates that the calculated F is greater than F of the limit value by 0.01% of statistical significance indicating that the value of stocks influences credit agency ratings. The R² value indicates the existence of a significant correlation between variables and the standardised β coefficient has a very strong influence. Based on historical data on stock exchange value developments, it is possible to create a prognostic model within acceptable control limits using the SPSS software.

Figure 9: The prognostic model of stock value trends of Mol Hungary



Source: Authors' processing in IBM SPSS Statistics – in 24 according to data from Table 2

The prognostic model indicates the probability that stock value will increase over the next 4 quarters, which is also the long-term forecast of rating agencies. The conducted analysis does not indicate a possible increase in the business risk of the Mol Hungary company.

4. CONCLUSION

Business risks and their methods of their analysis include a number of influence variables, many of which are hidden, and many will be expressed in a period to come. Management makes business decisions on daily basis, and every decision, no matter how simple, involves the risk that it will not be implemented or will not achieve the desired result. Nevertheless, business risk management is an exact process that follows its stages and results in a number or a description acceptable enough to be used as an instrument for managing business decisions. Science has developed many business risk management tools, techniques, and models, but has yet to overcome individual solutions managers in crisis or speculative situations resort to when hazard prevails. Furthermore, there are numerous investors, speculators or brokers trying to identify the potentials of certain MNCs and invest in their stocks or enter credit arrangements. Their business risk is correlated with the business risk dealt with by MNCs, and their interests are the same – business success and stable income (profit).

The analysis conducted in this paper of the selected MNC, which primarily operates in the energy sector of the European continent, showed that this is a large and respectable company in terms of business performance. In accordance with the hypothesis of the paper, verified by the analysis conducted in the paper, it is concluded there are valid arguments in favour of the claim that, by knowing different qualitative and quantitative methods of risk analysis, MNCs (the selected model) can determine the vulnerability of the system due to the possible existence of business risks. It is indicative and still significant in the business world that, despite the good intentions of politicians, environmental associations, and numerous activists, the companies that base their activities on the exploitation of classic fossil gas and oil energy sources they extract on the soil of the European continent still have the best prospects.

LITERATURE:

1. Andrijanić, I., Gregurek, M., & Merkaš, Z. (2016). *Upravljanje poslovnim rizicima*. Zagreb: Libertas-Plejada
2. Brooks, S. G. (2005). *Producing Security*. Princeton: Princeton University Press.
3. Crkvenac, M. (1995). Uspori i uloga transnacionalnih kompanija i iskustva za Hrvatsku. *Računovodstvo i financije*, 41(3), p. 120-132.
4. Cetinski, V., Perić, M., & Jovanović, D. (2008). *Poslovne simulacije*. Opatija: Faculty of Tourism and Hospitality Management
5. Dabić, M. (2007). Uloga multinacionalnih kompanija u promicanju tehnološkog razvoja zemalja u tranziciji. *Zbornik Ekonomskog fakulteta u Zagrebu*, vol. 5., 2007., 1. p. 32, 5(1), p. 29-42.
6. Dicken, P., (2007.) *Global Shift: Reshaping The Global Economic Map in The 21st Century*. London: Sage Publications.
7. Dunning, J. H., (2002.) *Regions, Globalization, and the Knowledge-Based Economy*. Oxford: Oxford University Press.
8. Fortune Global 500, available at <http://beta.fortune.com/global500>
9. Jones, G. (2005). *Multinationals and Global Capitalism From the Nineteenth to the Twenty-first Century*. Oxford: Oxford University Press.
10. MarketsInsider, https://markets.businessinsider.com/stocks/mol_hungarian_oil_and_gas_a-stock
11. Miletić, S., Bogdanović, D., Mihajlović, D., & Krstić, V. (2018). Analiza poslovnih rizika u rudarskim kompanijama. *Bakar*, 43(1), 41-52.
12. Navaretti, G. B., & Venables, A. J. (2004). *Multinational Firms in the World Economy*. Princeton: Princeton University Press.
13. OECD, (1999). *Benchmark Definition*, Third edition, Paris.
14. Porter, M. (2008). *Konkurentna prednost postizanje i održavanje vrhunskog poslovanja*. Zagreb: Masmedia.
15. Saaty, T. (2008). Decision making with the analytic hierarchy process. *Int. J. Services Science*, 1(1), p. 83-98.
16. Sprčić, Miloš. (2013). *Upravljanje rizicima*. Zagreb: Sinergija.
17. Stainer, A. & Stainer, L., (1998.) *Business Performance –a Stakeholder Approach*. *International Journal of Business Performance Management*, London, 1(1), p. 2-12.
18. UNCTAD, (2019). *World Investment Report 2018*, Geneva: United Nations Conference on Trade and Development.

PROBLEMS OF STRUCTURAL DEFORMATION AND ANALYSIS OF THE STATE OF REINVESTMENT IN AZERBAIJAN

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ABSTRACT

Attaining objectives of socio-economic development requires establishment of effective mechanisms of modernization of an economy structure. The necessity of applying reinvestment mechanism in the course of reforms is analyzed in the article. The directions of reinvestment and the relationship between economic growth, reinvestment and economy sector have been reviewed. The influence of investment and reinvestment on changes in the economy structure has been analyzed. The problems of structural deformation have been disclosed and the state of the branches for investment and reinvestment investments has been described. The state of invested reinvestments, including the one in the public, private sectors of the economy has been analyzed. The difficulties arising from the usage of reinvestments have been displayed. The complexity of the interrelationship of reinvestment, economic growth and sustainable innovative development has been determined, the possibilities to optimize the economy structure through the reinvestment mechanism have been analyzed. In the course of study, comparative analysis, methods of observation and groupings have been used. Recommendations have been put forward to improve an efficiency of investments and practical recommendations concerning reinvestments have been provided.

Keywords: *Reinvestment, Economic growth, Industries, Regulation, Investments, Structure*

1. INTRODUCTION

Adaptation to the new challenges of the global economy, a sharp decline in oil revenues, providing economic growth due to the mining industry, insufficient acquisition of innovative equipment and technology over the years of independence of Azerbaijan required to improve the national economy. Fairly often, and particularly in the countries with a predominance of raw materials, the diversification of the economy and transformation of its structure forms the basis of such improvement. Reinvestment mechanism is the one of the most effective aspects of economic diversification. Given that almost half of the investments implemented at the expense of domestic resources fall to the share of state budget, the transfer of the main source of financing of domestic investments from the state budget to the private sector can reduce the risks related to the management and the stability of public finances. On the other hand, despite the high growth rates of the non-oil sector, foreign direct investments in this sector still remains low. New tasks that takes into account the requirements of sustainable innovation development, the main directions of the strategic roadmap for diversification of the national economy and the activities plan for 12 directions for 2016-2020, long-term and target views before and after 2025 approved by the Executive Order dated March 16, 2016 and the Decree of the Presidential Republic of Azerbaijan dated December 6, 2016, requires conceptual approaches in resolving issues of modern regulation and expanding the implementation of the reinvestment mechanism. The objective of the article is to determine potential directions and ways of implementing the process of sustainable innovative development through reinvestment. To attain this objective, the following tasks have been put forward:

- To reveal the problems of structural deformation and to reveal the state of industries in terms of investment and reinvestment investments;

- To analyze the state of invested reinvestments and review government, private sectors of the economy;
- To analyze the relationship of reinvestment, economic growth and sustainable innovative development, the potential of optimizing the structure of the economy through a reinvestment mechanism.

We used the methods of comparative analysis, observations, grouping in the course of the study.

2. ANALYSIS OF THE IMPACT OF INVESTMENT AND REINVESTMENT ON CHANGES IN THE ECONOMY STRUCTURE

Funds of several specialized funds such as the State Oil Fund of the Republic of Azerbaijan (SOFAZ), the Azerbaijan Investment Company (AIC), the National Fund for Entrepreneurship Support (NFES), etc. are used for the implementation of reinvestments in the country. While the funds accumulated in SOFAZ over recent years have been directed towards financing the development of priority sectors of the economy and socially important projects, AIC's objective deals directly with financing projects to develop branches of the non-oil sector, in particular heavy industry, alternative and renewable energy, tourism, ICT, freight logistics etc. The National Fund for Entrepreneurship Support of Azerbaijan funded projects for the development of enterprises and agricultural infrastructure in the regions [Hajiyev A-K.G (2013)].

2.1. Analysis of invested reinvestments in the economy

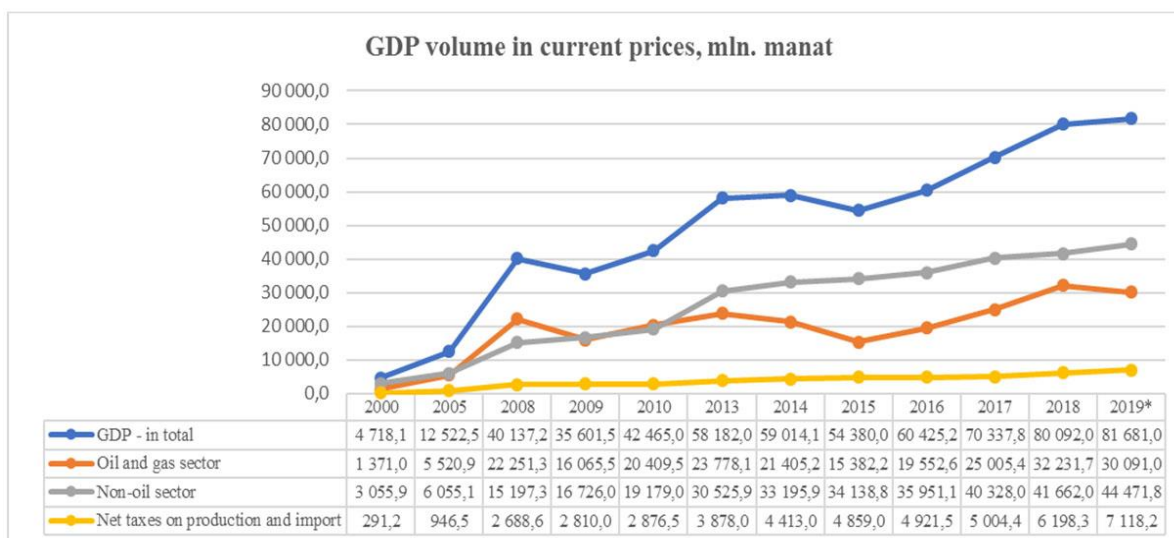
Historical development of the sectoral structure of the Azerbaijani economy is linked with the development of primary sectors of the economy (agriculture, mining), then with the development of secondary sectors - industrial production, construction; and finally, with the development of third industries, mostly with services and tourism sectors. The stages of development of the sectoral structure industry occurred cyclically. Therefore, the structure of Azerbaijan economy nowadays is developing in the following direction:

1. Development of innovations and nano-technologies, increasing the value and volume of services of intellectual and information areas, tourism and other types of services;
2. Reduction in the share of the mining industry, with the condition of increasing its profitability and efficiency;
3. Growth of the non-oil sector, mainly manufacturing, light and food industries, the agricultural sector.

Studies show that GDP grows, the share of GDP yield in the non-oil sector for 2000-2018 is increasing steadily and its growth over the years amounted to almost 13.6 times.

Figure following on the next page

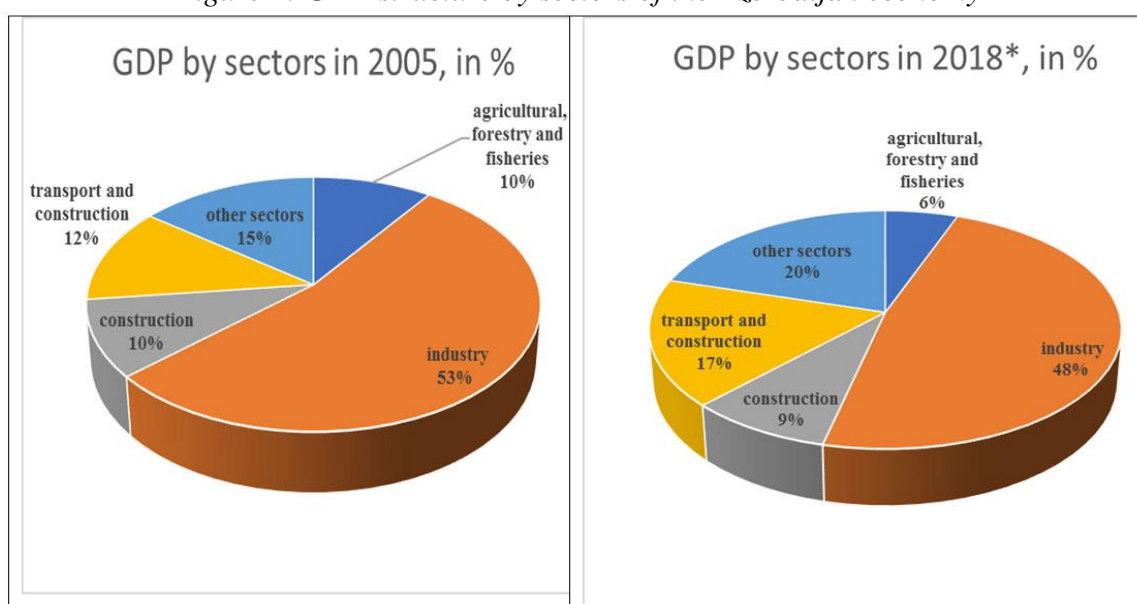
Figure 1: GDP volume in current prices, mln. manat



Source: Graphical chart is based on GCS data

The sectoral structure of the national economy is affected by the ownership structure (state, private and municipal), as well as the interests of owners. Thus, during the transformation period, a lot of spheres stagnate, while some others, on the contrary, run up animatedly. Classification and systematization of the sectors of the Azerbaijan economy allows to identify its share in GDP and GNP, as well as to analyze the activities of economic entities, their role in the growth of national wealth. The analysis shows that the following sectors are considered to be promising: agriculture, industry, transport and communications. The Azerbaijan economy is divided into sub-sectors which is determined by the more specific objectives of the policy. If we consider the current structure of the Azerbaijan economy, then it features by the predominance of industry, which requires large and long-term capital investments. The study revealed that for 2000-2017, the share of GDP in such sectors as forestry and agriculture, fisheries decreased by 10.1%, transport and communications by 3,6% respectively.

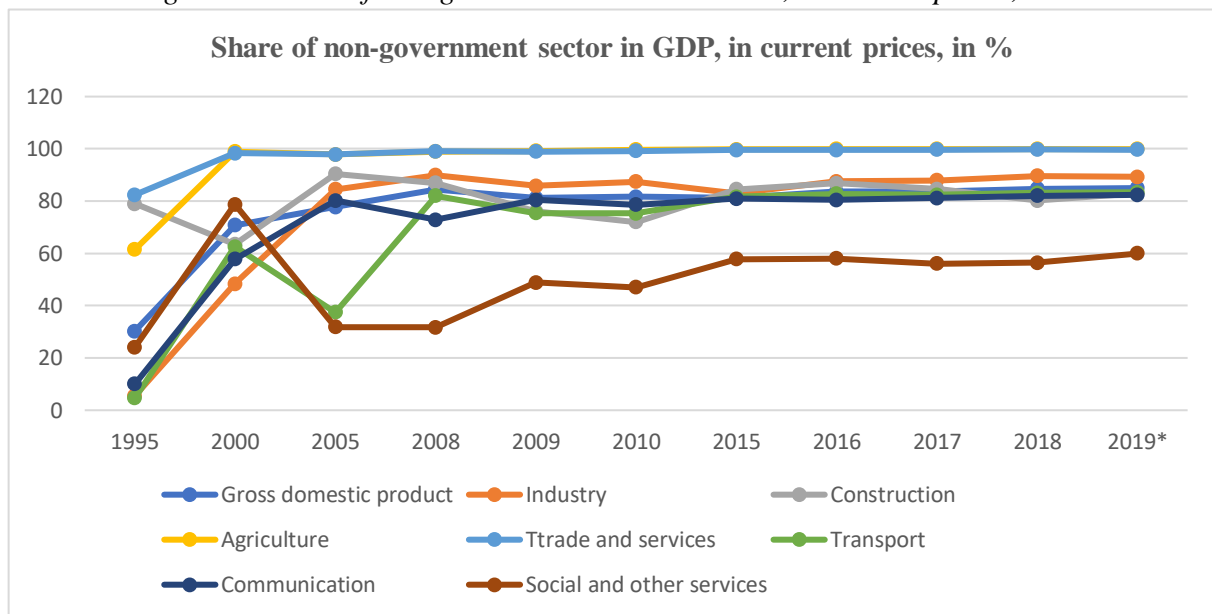
Figure 2: GDP structure by sectors of the Azerbaijan economy



Source: Graph charts are compiled based on data from
http://www.stat.gov.az/source/system_nat_accounts/

The analysis showed that if 55-66% of the GDP fell to the share of the oil sector in 2005-2008s, on the contrary, in the 2009-2010s there was a decrease in the share of the oil sector and in the following years a gradual increase in the share of the non-oil sector. If in 2000 the amount of the non-oil sector in GDP amounted to approximately 3 billion manats, as early as in 2018 it amounted to over 41 billion manats. It should be noted that in the country's economy more than 4 million people are considered to be employed, of which over 1560 thousand people (38.4%) are employed in agriculture. Although these sectors produce only 5.6% of GDP (in 2017). This is an evidence of a decrease happened. Whereas, in 2000-2017, the share of industry in GDP increased by 4.1%, construction by 3% and other sectors by 5.9%, then the share of agricultural, forestry and fisheries decreased by 10.1%, transport and communications by 3.6%. One of the directions is the development of large industrial complexes across the country, which will allow to completely get rid of dependence of the economy on the oil and gas sector in the future. Thus, modern chemical, oil-chemical, metallurgical, machine-building complexes, enterprises of light and food industries, and construction are being set up in the country" [Hajiyev A-K. G (2013)]. If we consider the share of the non-government sector in GDP, then since 2000 its prevalence is visible and in 2000-2018 its share increased by 13.9%. It can be noted that besides the areas related to natural monopolies, and this is mainly electricity and water supply, in other areas of industry private property predominates.

Figure 3: Share of non-government sector in GDP, in current prices, in %



Source: Compiled based on data from <http://www.stat.gov.az>

In the structural and sectoral part, there are export-focused industries (these are oil and gas sector and electric power industry), as well as those focuses on national and foreign markets (agricultural, light and food industries).

3. ANALYSIS OF THE RELATIONSHIP OF ECONOMIC GROWTH VS. REINVESTMENT

Economic growth allows not only to determine the position of the national economy in the global economy, however, its qualitative and quantitative features as well and identify changes that occur under the influence of multiple factors. The latter include cultural and educational changes, demographic factors, etc. During globalization, the theory of "endogenous economic growth", which accounts for the principle of calculating personal opportunities with a key role

of innovation, is supplemented by exogenous factors. That is, taking into account the initiative interaction of subjects with the outside world. The impact of the outside world can be effective in synthesis with a viable domestic economic system that can ensure sustainable economic growth through increased investment, primarily in the production of high-tech products” [L. Igonina (2004)]. On the other hand, “the total volume of national investments is not limited by the amount of satisfied market demand, since they include investment requirements for the reproduction of fixed assets in the non-market sector of the social sphere, organizations and state enterprises, security, defense, etc.” [Sokolinskiy V.M. (2010)]. In the course of nature, with the lapse of time, the possibilities of an extensive growth type get exhausted, it is gradually replaced by the investment and effective investment types of economic growth. When analyzing the state of investment activity of industries, it becomes obvious that light industry fall under the group of industries with minimum investments, and this mostly covers textile industry, manufacture of clothing, leather and leather products, shoes, paper and cardboard, followed by the chemical industry, production - pharmaceutical goods, machinery and equipment, cars and trailers. All of these sub-sectors form the basis for the reinvestment process. In other words, these sectors lack their own sources of investment financing on the one hand, and they are also limited in investment as compared with others on the other hand. This means that laying the basis for reinvestment, expanding and increasing effectiveness of the reinvestment process is required to update fixed assets, apply innovations and ensure sustainable growth in the domestic production. However, amid the crisis, government expenditures on investments should not exceed a certain share of GDP (up to 50%). In a crisis and limited financial opportunities for “budget financing of innovations, a need in fundraising from additional sources (own funds of organizations, private investments, funds of extra-budgetary funds, borrowed funds of international financial institutions) will grow up” [Morozova T.G. (2002)]. The group of industries provided with investments better than others and related to investment, as well as investment-dependent types of economic growth includes: mining, metallurgy, manufacture of finished metal products, except machinery and equipment, food, beverage, woodworking and manufacture of wood products, manufacture of rubber and plastic products, building materials, other transport equipment, furniture, installation and repair of machinery and equipment. Setup of industrial agglomerations is especially topical for resource-producing countries. Proximity of enterprises within a single technological chain, creating advantages linked with a labor market, facilitating the exchange of technologies, marketing research results, managerial approaches, experience, successes and failures leads to cost and risk reduction, promotes innovation and gain in productivity. Within economic growth, the electricity industry is developing to meet power requirements. By applying innovations in this industry (to produce alternative and reproducible energy), Azerbaijan strives to not only ensure its energy security, but to export power energy as well. As we have noted, there is a direct connection between economic growth and reinvestment to be considered in ensuring sustainable development. The more investment and reinvestment in the main sectors of the economy, the higher is an economic growth rate. And this contributes to the economy sustainability. In a real situation, in order to provide specific support for development, actions are required to be implemented in the following key areas of the reinvestment process:

- Continuous increase in the profitability of production, as the main condition for the growth of the accumulation of reinvestment resources and their use;
- Increasing reinvestment activity through joint projects with foreign companies, strengthening of control over the possibilities of illegal capital outflows;
- Improving economic regulatory mechanisms (tax, credit, depreciation, etc.), increasing role of insurance companies, setting up a system of guaranteeing and securing reinvestments to reduce risks and ensure growth of private capital in the real sector;
- Improving the mechanism of capital overflow from surplus sectors to deficient ones;

- Analysis of the formation of investment sources and the identification of new sources of reinvestment.

As a rule, the problems of financial stabilization and investment policy of the economy over the past 20 years have been aimed at creating a favorable investment and business climate (enacting laws and providing guarantees, discounts, etc.) and attracting investments (mostly foreign ones), which served as the basis for economic growth, restructuring and improving welfare of the population. However, even after the transition to economic growth, the problem of reinvestment not only did not lose its urgency, but acquired new relevance as well, that is, it became necessary to solve the problem of capital outflow from the country and ensure the attraction of reinvestment. In light of growing competition, “national governments are creating a new form of market - the international services market for foreign investors, which is an institution within which the offer of services is made by government authorities. Investors are interested in a wide range of factors: features and qualitative characteristics of national legislation, the reliability of the political climate, the degree of bureaucratization, the quality of labor resources, the degree of development of technical and social infrastructure, criminal situation” [Sokolinskiy V.M. (2010)]. Despite the favorable conditions created over the recent years, a sphere of reinvestments in the non-oil sector has not yielded desired results yet. Firstly, the increase in investment to the required level for the development of all industries is due to a long process and risks. Secondly, the amount of direct domestic investment is not in line with needs, that is, a shortage is visible. Thirdly, own and budgetary funds remain the main source of financing, which often leads to restrictions. The low weight of bank loans in financing investments, as well as the use of granted loans for the loans with a term of more than one year, for working capital loans and other operations, affect growth adversely. Fourth, the intersectoral structure of investments is very heterogeneous, that is, different sectors are unevenly provided with them, and this problem still remains. Low level of transformation of savings into investments, unplanned overflow of investment resources between sectors through the banking system, a weak and undeveloped stock market, which is also not capable of performing the function of ensuring reinvestment, affects the economic system in its entirety. Fifth, despite an increase, so far the share of domestic investment in GDP in the real sector has remained very low.

4. CONCLUSION

Summarizing the study, we have come to the conclusion (results) as follows: The emergence of a new reinvestment management mechanism can be considered a qualitative restructuring of the economy of the Republic of Azerbaijan. There is a concept of "competent investment", which implies a guarantee of confidence in the future through the preservation and increase of savings. The main direction of stimulating reinvestment and increasing efficiency in their use is comprehensiveness. In the context of the problem under consideration, this means that a factor analysis of reinvestment is required to determine the degree of their influence upon overall strategy of economic diversification. Achieving economic growth is closely related to the dynamics of investment and their effectiveness. The main mechanism for increasing investment efficiency is the creation of an improved system for attracting reinvestments, which differs from the traditional system in its profitability. Many subjects of national economies strive to increase their competitiveness through reinvestment. However, the limited resources in their receipt require consideration of mechanisms to endeavor and regulate it. Therefore, when developing an economic development concept, the basis for applying the reinvestment mechanism is: determination of the basic areas of development, areas in which reinvestment is required, medium-term forecasting of results, operational implementation of structural

transformations and diversification of production using production capacities, scientific and professional personnel, and application of innovative activities.

LITERATURE:

1. Decree of the President of the Republic of Azerbaijan dated December 28, 2018 "On Further Improvement of Governance in Export and Investment Promotion", <http://www.e-qanun.az>
2. Executive Order of the President of the Republic of Azerbaijan dated March 30, 2006 "On Additional Measures to Promote Investment Activities", <http://www.e-qanun.az>
3. Executive Order of the President of the Republic of Azerbaijan dated January 18, 2016 "On Additional Measures to Promote Investments", <http://www.e-qanun.az>
4. Executive Order of the President of the Republic of Azerbaijan dated January 18, 2018 "On a number of measures to promote investment activities and protect the rights of foreign investors", <http://www.e-qanun.az>
5. Hajiyevev A-K.G. Features of the policy of economic growth in Azerbaijan in the post-crisis period. Journal "The Chronicle of Economic Reforms" No. 3 (11)/2013, 112-123 pp.
6. Igonina L.L. The investment paradigm of Russia's development in the context of economic globalization. Basic Research Journal No. 3, 2004, 141-145 pp.
7. Macroeconomic regulation: the role of the state and corporations. Training aid edited by V.M.Sokolinskiy. M.KNORUS, 2010 -248 pp.
8. State regulation of the economy: Training aid for universities / T.G. Morozova, Yu.M. Durdiyev, V.F. Tikhonov et al; Ed. prof. T.G. Morozova. - M.: UNITY-DANA, 2002. - 255 pp.

ELECTRONIC INFORMATION EDUCATIONAL ENVIRONMENT AS A NECESSARY COMPONENT OF THE MODERN EDUCATION SYSTEM

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ABSTRACT

The Federal State Educational Standard of Higher Education in the Russian Federation are expanding the Scope of a higher educational institution towards the formation of the university electronic information-educational environment (EIEE). Along with the innovative communication technologies, the internal resources of the educational institution, of all publicly accessible web services and open educational resource created by the pedagogical community are becoming an effective mechanism for development of an E-Learning Environment. The teacher gets additional opportunities at the creative approach in the process of language education, for the organization of educational cooperation, for involving students in the development of EIEE. A teacher can transform student-learning activities from a reproductive form to a productive, personalized form. E-learning is an educational approach that combines different types of multimedia technologies to ensure better education experiences for students and teachers. Today, it is a popular approach among especially teachers and educators. The e-learning method allows teachers to provide educational materials and the related knowledge to a wide-range of learners by using more effective and efficient communication channels. Apart from that, the use of computer and Internet technologies enables educators and learners to take advantage of e-learning systems from all over the world. In this article the authors discuss some approaches to the educational process in the electronic information educational environment for the undergraduate students studying in the areas of "International Relations" and "Tourism" at Novosibirsk State University of Economics and Management. When teaching the disciplines "Foreign language", "Foreign language in the professional field", "Foreign language second", authors use educational Internet resources to individualize the educational activities of students in the traditional educational process. The important thing is to mark web resources are becoming an important tool for student learning. Their use contributes to the development of key competencies at a professional level in accordance with the educational standards of the new generation. Students are actively forming a mobile personality-oriented educational environment, becoming active participants in the formation of EIEE, which corresponds to modern trends in the development of education.

Keywords: *creative approach, e-learning method, electronic information-educational environment, mobile personality-oriented educational environment, Web resources*

1. ELECTRONIC INFORMATION EDUCATIONAL ENVIRONMENT

An electronic information educational environment is a combination of electronic information and educational resources, information and telecommunication technologies and means that ensure the development of educational programs by students.

The EIEE of any educational institution should include: firstly, the competence of participants in the educational process, and secondly, a set of technological tools that provide:

- 1) access to Internet resources, which guarantees interaction between participants in the educational process on the one hand, and interaction with governing organizations and other educational institutions on the other hand.

And, in addition, access to Internet resources makes it possible to carry out such activities in the digital environment as planning and fixing the course of the educational process and processing the results, as well as the placement and preservation of educational process materials.

The main directions of building an electronic information educational environment should be highlighted:

- 1) the formation of the technical and software component, i.e. hardware acquisition, acquisition and creation of software and network communications devices;
- 2) ensuring communication, i.e. the creation of an information and educational environment, the organization of the study of information and telecommunication technologies, as well as the formation of a set of training materials;
- 3) application in subject teaching, or in other words: as a means of teaching various age categories of students and as a means of teaching in all taught disciplines;
- 4) the organization of extracurricular educational space or the conduct of telecommunication projects and subject quizzes; development of the Internet space and the creation of inter-university network communities;
- 5) informatization of intra-university management: automation of management activities, development of diagnostic, control and monitoring techniques, as well as the creation and use of electronic document management;

2. FRENCH AS A FOREIGN LANGUAGE

It should be noted that the integration of digital technologies in the teaching and learning of languages has a long history. The use of information and communication technologies for teaching French as a foreign language has become even more relevant in conditions when the whole world was forced to switch to online teaching during a pandemic. The use of digital technologies in a lesson in a foreign language helps to increase student motivation, they (learners) become more active, communicative and creative. Today, a competency-based approach to education requires accomplishing tasks using linguistic, social, and even cultural opportunities. Thus, it complements the communicative approach. Thanks to the combination of communicative and competency-based approaches, the student is no longer passive, because all his knowledge is then mobilized to perform various tasks. The teacher should also constantly strive to develop and acquire new knowledge, deepen existing ones, as well as his interpersonal skills, in order to improve his relations with students. The use of digital technology should be seen as a combination of the right tool, culture and pedagogy. The Novosibirsk State University of Economics and Management has developed a course on regional geography in France. This course is taught using textbooks developed by university teachers, the content of which is mediated through audio and video documents, as well as various activities that allow you to study and deepen cultural as well as language skills, such as vocabulary and grammar. This course includes watching short videos lasting from 3 to 5 minutes, practical exercises and working together to develop the skills, conducting various quizzes to test the acquisition of knowledge. The course includes components of the IMAIP model of Marcel Lebrun [1], such as: inform, motivate, activate, interact and produce. At the stage of acquaintance with new material, students are offered a discussion topic that allows them to ask questions, deeper

understanding of the topic, and exchange information mentioned in the lesson. These actions are aimed at stimulating the student's thinking, encouraging interaction, exchange and collective production. Discussion situations mobilize maximum language skills in a context conducive to exchanges, while maintaining motivation for learning. These exchanges in a contextualized environment allow the teacher to evaluate not only knowledge and skills, but also moments that make learning French difficult. The use of various audio and / or video supports interest, allowing students to hear all the richness of the language. Undoubtedly, the regional geographic component has always been an integral part of the process of teaching foreign languages, which can be seen in the selection of authentic materials (including relevant audio and video materials) for studying topics related to everyday communication situations, forming adequate speech and non-speech behavior.

3. HEURISTIC MAPS

Learning vocabulary and grammar in a structured, organized, creative and at the same time fun way can be achieved with mind maps, which are tools for servicing distance learning on the discipline «French as a foreign language». The heuristic map (from the ancient Greek *eurisko*, "I find") has different names: mental map, conceptual map, cognitive map, mind map in English or idea map, mind map, tree of ideas or topogram. This is a chart, a chart that represents the relationships between different ideas or hierarchical relationships between different concepts, also presented as a data tree. This concept, conceived by Aristotle, was modeled by the English psychologist Tony Buzan to find a solution to the boundaries of linear writing and to suggest a way of organizing thinking that is closer to the functioning of the brain. This helps to structure the thought in order to highlight the connections that exist between the concept, idea and the information associated with it. "The heuristic method can be applied to all aspects of life where more effective learning and clearer thinking can improve human performance." (Buzan, 1993). A mind map represents syntheses that bring together a theme, its vocabulary and grammatical aspects to know in order to express yourself on the subject. For example, to study the subject of food, we learn vocabulary topics as well as "food", "store shelves", "sport", "diet", "health". We check grammatical forms like the imperative to give advice, impersonal turns like "it necessary to + infinitive" and the verb "must or should" to express an obligation or make a recommendation. During online courses it is essential that these courses are dynamic, fun and motivating. The learners very much appreciate the mind maps which facilitate the comprehension, the memorization of the concepts and knowledge necessary for the practice and the control of the «French as a foreign language». After the lessons the learners continue to use these cards while doing their homework effectively and with pleasure. Teachers can use many cards by going to sites including www.pinterest.fr as well as by making their personalized cards to synthesize a didactic unit or prepare a lesson. To make people want to learn using playful media, learners must be involved in the teaching process by offering to draw their own cards. This work visualizes the information to better summarize and understand it, involves the learners in the construction of the concepts studied, makes them prepare an oral presentation. Thus, this activity will motivate them, help to revise the material learned, speak and build their sentences based on the information on the card. The creation of a mental map does not require many things for its realization, however for this map to be effective we must think about:

- 1) Define the main theme and the objectives to be achieved.
- 2) Overall structure of the content by important information as well as additional information presented in the form of branches.
- 3) Find the keywords used to show the content of the card.
- 4) Use images and colors that make memorization easier because the brain memorizes images more easily because they are addressed to our emotions and are linked to long-term memory.

To be able to create mind maps via a digital tool there are software and applications. We can cite for example <https://www.mindomo.com/fr> where we find different cards and we use with learners.

4. CONCLUSION

The electronic informational educational system of a higher education institution allows you to receive online education today, which is an important precaution to ensure that transmission of the virus is limited. Of course, online education has its advantages and disadvantages compared to traditional teaching methods. Online education allows those who combine work and training to successfully enter these classes into their work schedule. What is impossible with full-time study, which requires a predetermined schedule and a specific place. Online education allows you to learn how to manage your time, to be self-disciplined, which is important for any age category of students. Each student works at his own pace. If someone is faster than others, then others do not need to wait for them. The converse is also true: if someone is slower, then he can take his time without disturbing anyone. Training can also be adapted according to the level of training. Distance learning, in contrast to full-time study, provides training in asynchronous time and place. Students no longer need to travel and keep to timetables. Students only need to connect to WI-FI and a laptop, tablet or smartphone. E-learning allows students who want to stay home, for example, for family reasons, to use their free time to continue their education and development on a professional level. With distance learning, there is no need to travel or ask the teacher to come home, lessons will be held online. Learners can work in a familiar environment that allows them to work easily. In addition, significant time savings should be expected. E-learning, when well designed, is now based on a variety of fun media: videos, interactive formats, podcasts, forums, profiles, slide shows, etc.

LITERATURE:

1. Buzan T. & Buzan B. (1993) *The mind map book*, London, BBCWorldwide Limited.
2. <https://fr.slideshare.net/lebrun/le-modle-imaip-cooprer-et-sentraider-par-le-numrique>

RESEARCH ON CONSUMER BEHAVIOR IN THE ENVIRONMENT OF MODERN MARKETING CHANNELS

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ABSTRACT

In the modern world, classic forms of marketing are becoming a thing of the past. Accelerated advances in technology have led to the emergence of completely new and up to several years in the past unimaginable marketing and sales tools. Over the years, marketing experts have devised new flyers and titles to watch from the car. Today they are becoming part of the past. Artificial intelligence and new programs enable the design of so-called "smart" marketing campaigns. The work done by humans is now largely done by artificial intelligent systems. In Croatia, we are witnessing the increasing use of such programs and the emergence of new occupations in the so-called digital marketing. The question is whether the experts felt that their campaigns were not successful enough or whether they wanted to alleviate their business problems. We will address the issue in another paper. Within this paper we want to present consumer behavior in modern marketing channels. Consumers are exposed to new ads on a daily basis under the baton of young marketing managers. The aim of this paper is to examine consumer behavior in the use of modern marketing channels in Croatia. For the purposes of this research, a survey questionnaire was conducted which, among other things, examines the extent to which consumers are familiar with modern marketing channels and whether they make purchases through these channels. The contribution of this paper is that it will present the current situation of consumers in the field of digital marketing. The paper can serve young marketers who are developing new innovative models of marketing advertising, but it will also give insight into the situation to researchers dealing with consumer behavior.

Keywords: consumer behavior, digital marketing, modern marketing channels, marketing

1. INTRODUCTION

The term *Consumer Behavior* is defined as one of the disciplines of marketing in which the behavior of individual, group and institutional consumers in the process of purchasing, using and depriving products and services, and the impact of this process on consumers and society are studied.(Čičić et al., 2009). Consumer behavior is a well-developed marketing discipline that should serve to better understand all the psychological processes that consumers go through when expressing an intention to buy or the act of buying. Serious companies in their marketing departments pay high attention to all factors of consumer behavior, because only in this way it is possible to reach the customer and achieve the goal. Marketing managers and other professionals should not only aim to make a purchase, but it is necessary to conduct market research, which in this case would relate to consumer habits and accordingly create a long-term strategy that will not only encourage purchases but also build loyal customers who can be "noisy" brand builders. The term modern marketing channels includes all social networks, new technologies, chatbots and other programs that serve to improve the achievement of sales results. Consumer behavior in this new marketing environment is dynamic and unpredictable and that is the reason for this research. We believe that it is necessary to make the best combination or model that will have the admixture of classic marketing and new digital channels. Every business should of course test strategies and determine which one has the strongest impact on their consumers. However, it should be emphasized that despite new technologies, consumer factors remain the same and unchanged, but perhaps in the future we

will encourage such developments to witness the development of new factors that will expand the horizons of the modern marketing profession.

2. THE LINK BETWEEN CONSUMER BEHAVIOR AND MODERN MARKETING CHANNELS

Before we establish what the connection is between consumer behavior and modern marketing activities, we will explain in more detail what these terms represent in general. A consumer is a specific organization or institution that buys products or services using them to perform their business, and we divide them into two basic groups: (Živković, 2011)

- Final consumer
- Business consumer

Consumer behavior is the process of obtaining and consuming products, services and ideas from a consumer unit. It also includes after-sales processes that include valuation and post-purchase behavior. It should be noted that a consumer unit means an individual or a family (household) that makes a decision. It can also be an expert group in the company, institution, etc. (Kesić, 2006). Consumer behavior is a discipline that has begun to evolve in line with market developments and new marketing techniques to facilitate the path to consumers. Consumer behavior is a young scientific discipline but its importance is fundamental to understanding all the psychological processes that lead to the act of buying. Research on consumer behavior is important because in this way organizations can and do come to different knowledge about consumer behavior, about their purchases in the past and present, the degree of satisfaction with the choice and quality of certain products and services (Milić, 2018). When studying consumer behavior, it is always necessary to keep in mind five basic principles (Kesić, 2006) :

- The consumer is sovereign
- Motives of consumer behavior can be identified
- Consumer behavior can be influenced
- Influences on consumer behavior should be socially acceptable
- Consumer behavior is a dynamic process

Now that we know the basic principles of consumer behavior, they need to be properly understood and applied in modern business. It is also necessary to explain the concept of modern marketing channels. In this paper, the term modern marketing channels means all the latest digital marketing tools. Modern marketing tools have become very important in creating modern marketing tools. There are also some companies that today base their marketing activities solely on digital marketing tools. Whether it is good to base marketing activities only on these foundations is a question that should be further and extensively explored. Digital marketing is an integral part of marketing that uses digital technologies based on the Internet and the web, such as desktops, mobile phones and other digital media and platforms to promote products and services (https://en.wikipedia.org/wiki/Digital_marketing). In digital marketing it is possible to collect a very large amount of data that can be quantified. The obtained data are then analyzed to determine all areas for optimization (Janko, 2017). Digital marketing is a term that describes the use of various electronic media such as the web, e-mail, and other wireless media, which together with digital data on consumer behavior for the purpose of more efficient marketing management (Chaffey et al., 2009). In this paper, we will list some of the digital marketing tools and briefly explain them. Modern digital marketing tools are:

- WEB page
- Search Engine Optimization
- Advertising on search and display networks
- Socialmedia Marketing

- E-mail Marketing
- Content Marketing Tools
- Graphic Design Tools
- Advertising via Mobile Devices
- Use of Artificial Intelligence and Modern Chatobot Programs (AIMCP)

2.1. Web Site

The website is a mirror of the company on the internet. It is also important to point out how it is actually the foundation for all other digital marketing activities. The purchase process itself can be done through the website if there is no e-shop. The efforts of all digital marketing campaigns are focused on the customer going to the website. It must be transparent and must contain a clear explanation of the products or services that the company offers on the market.

2.2. Search Engine Optimization (SEO)

Website optimization for Internet search engines consists of a series of activities aimed at increasing page traffic from search engines. This is accomplished through improved placements on search results for targeted keywords (https://hr.wikipedia.org/wiki/Optimizacija_web_stranice).

2.3. Search and Display Network Advertising

It is necessary to first explain what is meant by *search networks*: These are all Internet search engines that are used to search for content on the web. One of the most popular is Google. Display networks are the ones that will appear to us without our direct participation. Advertising on these networks is highly developed, and Google has developed special programs that will allow you to create and track ads.

2.4. SocialMedia Marketing

Social media marketing is the use of social media platforms and websites to promote products or services (https://en.wikipedia.org/wiki/Social_media_marketing). Although the terms e-marketing and digital marketing are still dominant in academic circles, social media marketing is becoming increasingly popular for both practitioners and researchers. One of the first and most popular social networks that is significantly used for advertising is Facebook.

2.5. E-Mail Marketing

When we talk about e-mail marketing, we mean the most common creation of so-called newsletters. Today, there are a number of tools that allow you to quickly create modern campaigns. If the campaign is conducted in this way, it is necessary to read and follow the GDPR rules.

2.6. Content marketing tools

Modern marketing involves the delivery of content that will attract customers. How important this is is also shown by the fact that today there is a great demand for experts who are good at creating content. In addition to good content, it is also necessary to have a good strategy for publishing or delivering the same. There are a number of tools that offer automatic content publishing, and one of them is the FacebookCreator studio.

2.7. Tools for Graphic Design

The foundation of any ad is good design. Many companies are unable to fund professionals who deal exclusively with graphic design and therefore use modern tools to make it easier for

themselves to create good marketing ads. One such tool is Canva, which offers many ready-made solutions for creating various content.

2.8. Mobile advertising

By this way of advertising we mean ads that are delivered through a number of applications. The latest types of ads used via mobile phones are those via Viber or WhatsApp.

2.9. Use of Artificial Intelligence and Modern Chatbot Programs

Digital marketing tools are so developed that today in the world but also in our country there is the use of artificial intelligence. One example is chatbot programs that mimic a salesperson and sell products without human presence. It is also necessary to explore how well and to what extent such systems are used. Now that we have clarified the very discipline of consumer behavior as well as which are the modern marketing channels, it is necessary to establish what is the connection between consumer behavior and the use of modern marketing channels. One of the main features of modern marketing channels is that a lot of information is available to the consumer. If the consumer has more information to assume that he will make a good and thoughtful decision to buy. But on the other hand if we take into account what the consumer feels it is possible that on the other hand in a moment of happiness or sadness it is easily accessible to him via digital channels. Also whether some consumers will find it easier to decide to buy also depends on their lifestyle. If they spend a lot of time on social networks, the possibility increases that they will start looking for certain products. New digital marketing channels also provide personalized access to each consumer, for example by direct communication in the inbox, which gives the consumer a sense of importance and comfort and thus leads to the development of relationship marketing that is no longer present only in the B2B market. There are also possible negative consequences of advertising through digital marketing campaigns. Many young marketing managers use all means to position themselves in the minds of consumers. But consumers may notice that their privacy is compromised and that they are the target for achieving the financial goals of ruthless bosses. One of the more significant issues when we talk about consumer behavior in modern marketing channels is that consumers are willing to give up even a portion of their privacy for the sake of advertising that will be more relevant. (Schumann et al., 2014). We can point out that when applying modern marketing channels, we should pay attention to the target group to which we are advertising, set realistic goals, provide value to the consumer and in no way hurt his personal space.

3. RESEARCH ON CONSUMER BEHAVIOR IN THE USE OF MODERN MARKETING CHANNELS IN CROATIA

The question is why research consumer behavior at all? The answer is because it is the basis for a good job. The basic marketing concept emphasizes that organizations exist to meet the needs of consumers. These needs can only be met to the extent that they are understood (Nićin, 2014). In this part of the paper we will present the research results. The main goal of this paper was to determine consumer behavior in the use of modern marketing channels. The aim of the research was to determine whether and to what extent consumers are familiar with modern marketing channels and how and in what way they influence their behavior. The research was conducted through survey forms via the application "Googleforms". Googleforms or Google Forms is actually an application that allows you to collect data online at any time. This survey can be completed at any time, if it is set in such a way that the research is still ongoing and that the answers are accepted.

3.1. Research Hypothesis

Hypothesis setting is crucial for any scientific research. A scientific hypothesis is a claim is a claim that there is some independent variable that affects another, dependent variable (<https://www.mreza-mira.net/vijesti/razno/sto-su-hipoteza-i-teorija/>). In this paper, we have set two grounded hypotheses:

- The real need is what encourages consumers to buy regardless of the use of digital marketing channels
- Social networks are not the subject of aggressive advertising

3.2. Subject and goals of research

The subject of this research are consumers who are surrounded by the use of modern marketing channels by marketing experts. The aim of the study was to investigate what it is that still encourages shopping, whether consumers believe that the role of social media is weakening in the social segment but also stronger in the field of advertising and which social networks are most used but also for what purposes. The paper also determined what bothers consumers the most when shopping online and whether they use modern e-shops to buy.

3.3. Research methods and data sources

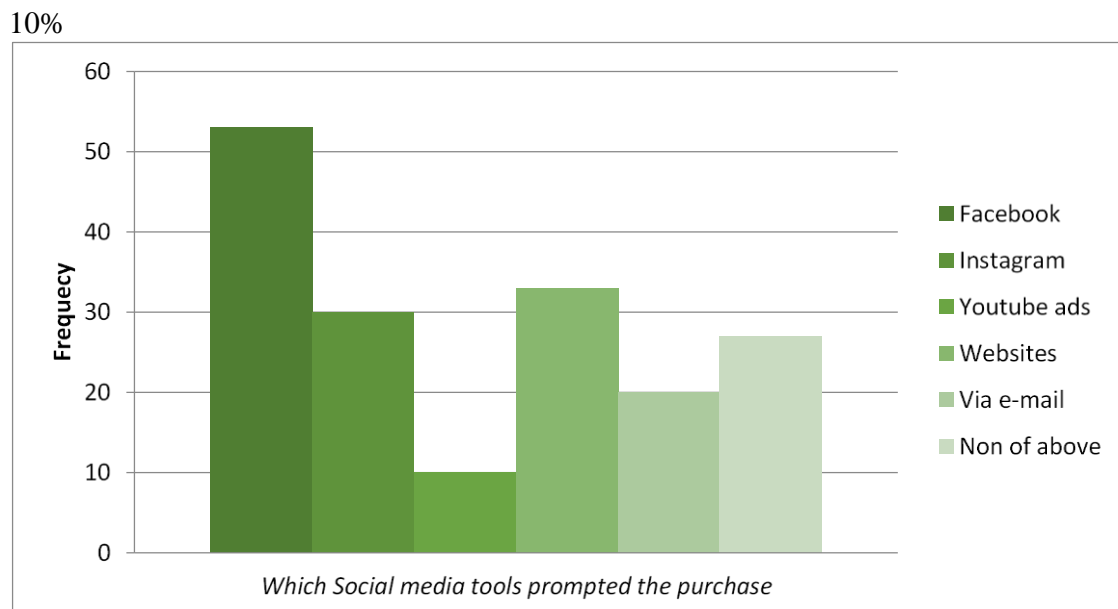
The measuring instrument of this research is a survey questionnaire. A survey is a method of collecting data by which we can obtain data on the attitudes and opinions of respondents (Perić, 2006). The survey questionnaire for the purposes of this research consists of 16 questions. In this survey questionnaire 4 questions related to socioeconomic and demographic variables. In the questionnaire, 3 types of questions are structured according to the Likert scale, while the remaining nine (9) questions are questions with offered answers since this is the type of research. The research was conducted in the period from 15 April to 25 June 2020 in Croatia. A single random sample was used for the study. The survey involved 100 respondents in Croatia, of which 30% were men and 70% women.¹ Respondents are students, social media professionals, the unemployed and employed. The main goal of the research is therefore to present the results on consumer behavior and awareness in the modern marketing environment.

3.4. Total sample response analysis

The age structure in this survey questionnaire ranges from 18 to 55 years. The survey covered the following age groups: 18-25 years is 33% of respondents, 26-35 is 42% of respondents, 36-45 is 17% of respondents, 46-55 is 8% of respondents. All respondents participated in the survey via the Internet, more precisely through Google forms. The survey questionnaire is dominated by people with a university degree. Such a research result could have been assumed since these are new ways of buying that require higher incomes and a higher level of knowledge. As many as 59% of respondents have a university degree, 23% have a secondary education, 15% have a university degree, while only 3% have a doctorate. If we look at the monthly incomes, they are the highest in the amount of 5000-8000 kuna, so it should be emphasized that it is within the Croatian average. In March 2020, according to the Central Bureau of Statistics, the average net salary per employee amounted to HRK 6,796 (https://www.dzs.hr/Hrv_Eng/publication/2020/09-01-01_01_2020.htm). We can also see that we have equal results in the amount of 20% of those who have incomes up to HRK 3,000, but also those whose income is HRK 3,000-5,000. 15% of respondents did not want to answer this question at all, which we also consider to be a justified procedure. 14% of respondents receive a salary in the amount of HRK 8,000-14,000, while 5% of respondents have a salary higher than HRK 14,000.

¹Due to the limited time period, 100 respondents joined the survey, and in the future it is planned to conduct a survey on a larger number of respondents in the city of Zagreb.

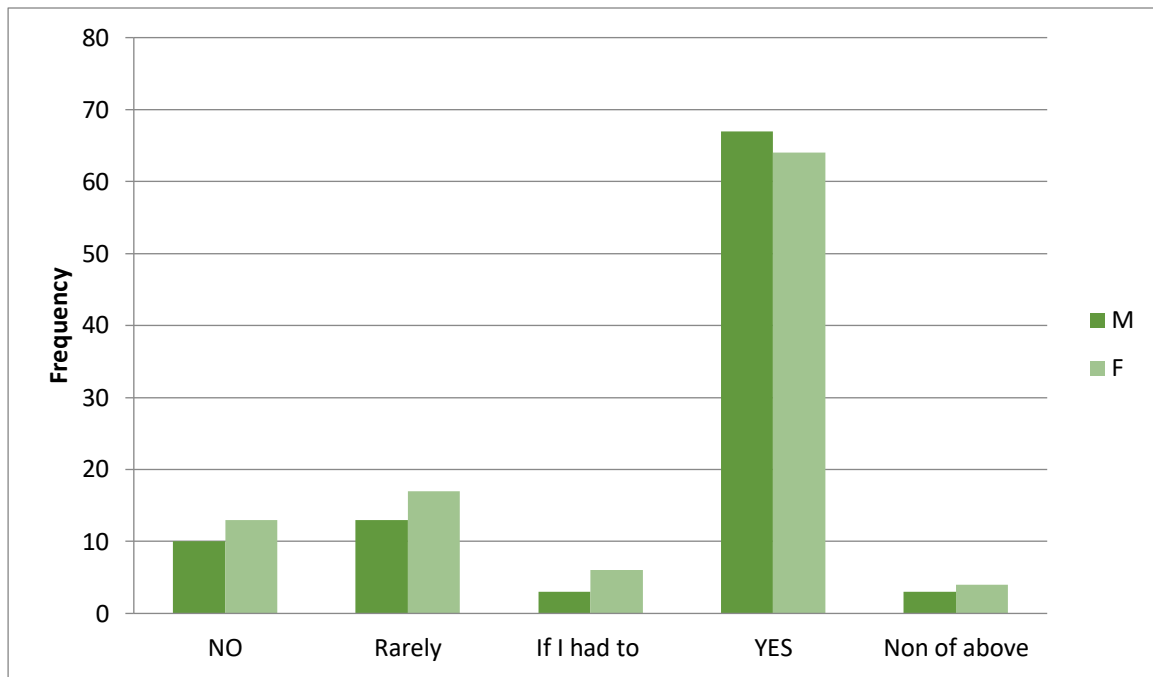
The next question we covered in our research is "Is the Internet available to you every day?" To this question we received the answer that the Internet is available daily to 100% of men and 99% of women. This data speaks about how important Internet coverage is nowadays and how almost every facility has its own network for connection, which of course brings immediate benefits to advertisers through digital marketing channels. To the question "What do you do most often on the Internet"? 43% of men and 26% of women confirmed the answer, 37% of men and 29% of women answered, 13% of men and 36% of women answered the answer, I searched for products and services, none of the men answered and 10% answered women, none of the above answered 7% men and 0% women. From this question, it can be seen that women are still in the lead in online shopping. o the question "Are you using the shopping app"? answer 40% of men and 21% of women did not answer, the answer if I have to answer was 10% of men and 6% of women, the answer was sometimes answered by 37% of men and women, the answer Yes was answered by 13% of men and 36% of women. So from this question it can be seen that women are also in the forefront in making purchases through the application. In the following graphs, we will show the important research results.



Graph 1: Which SOCIAL MEDIA tools prompted the purchase (Source: Empirical research)

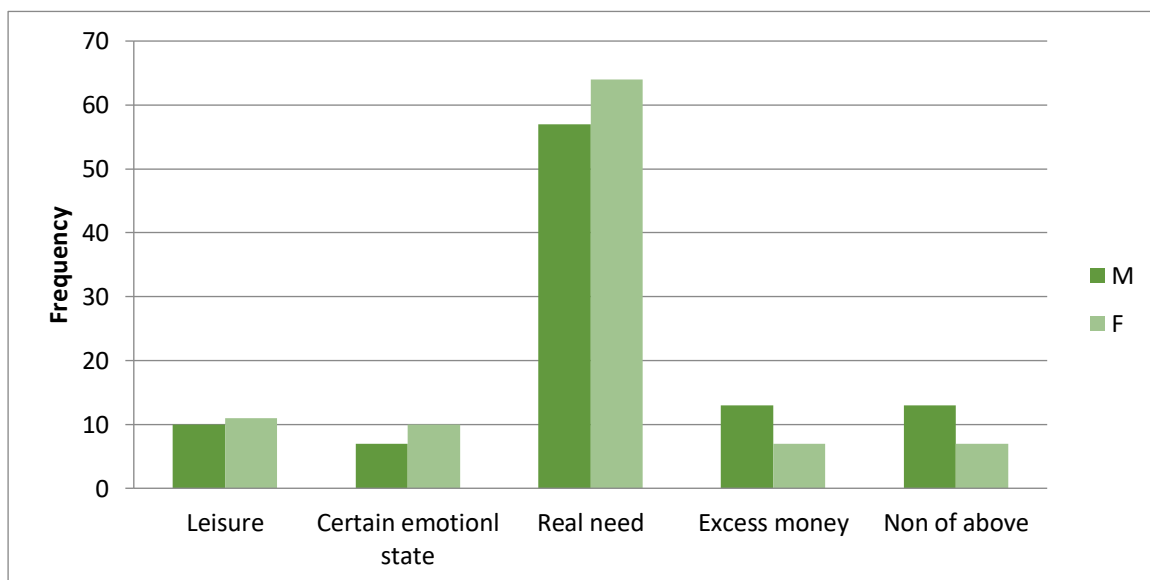
This figure lists 6 basic social media tools that we believe should be within the research. The data obtained by this research are: the answer to Facebook was given by 53% of men and 59% of women, the answer to Instagram was given by 30% of men and 41% of women, the answer to Youtube ads was given by 10% of men and 6% of women, the answer was given by websites 33% of men and 30% of women, the answer ads via e-mail was given by 20% of men and 14% of women, and as none of the above was given by 27% of men and 23% of women. From the above, it can be seen that the ads via e-mail and websites reached more men.

Graph following on the next page



Graph 2: Do you use E-shop to buy? (Source: Empirical research)

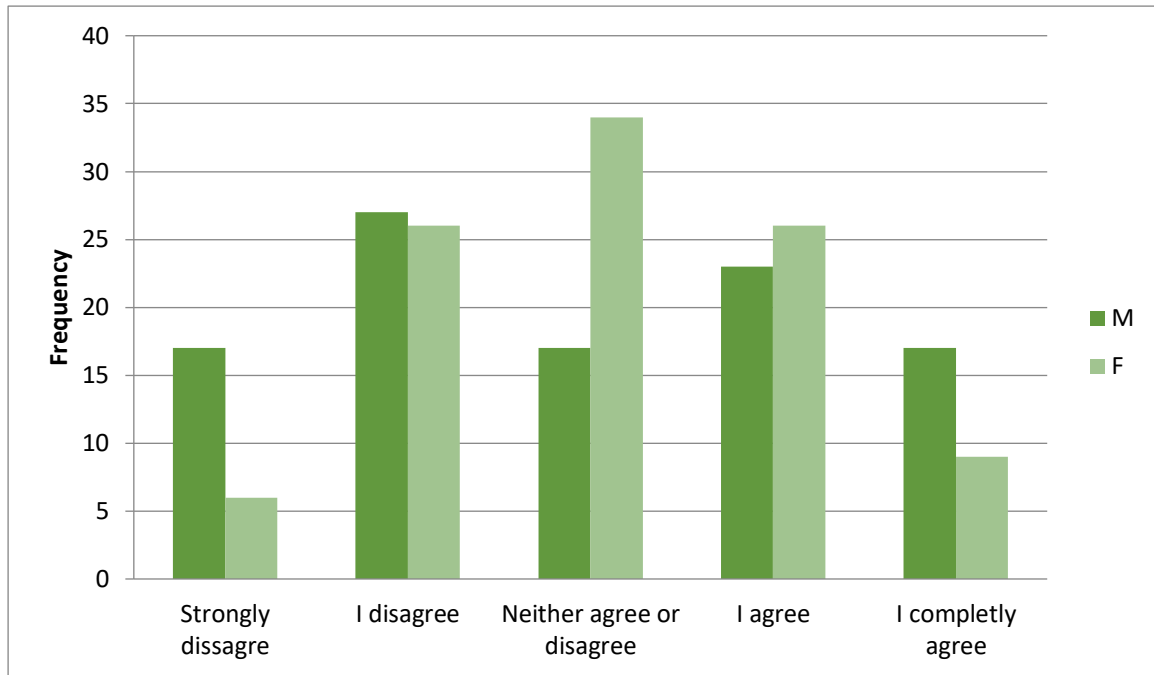
The data obtained with this question are: answer No 10% of men and 13% of women gave, the answer was rarely given by 13% of men and 17% of women, the answer if I had to was given by 3% of men and 6% of women, the answer Yes was given by 67% of men and 64% women. None of the above was stated by 3% of men and 4% of women. From the above it can be concluded that men use e-shop more to buy. As a reason we can assume that they want to spend less time browsing and buying products.



Graph 3: What motivates you to shop online? (Source: Empirical research)

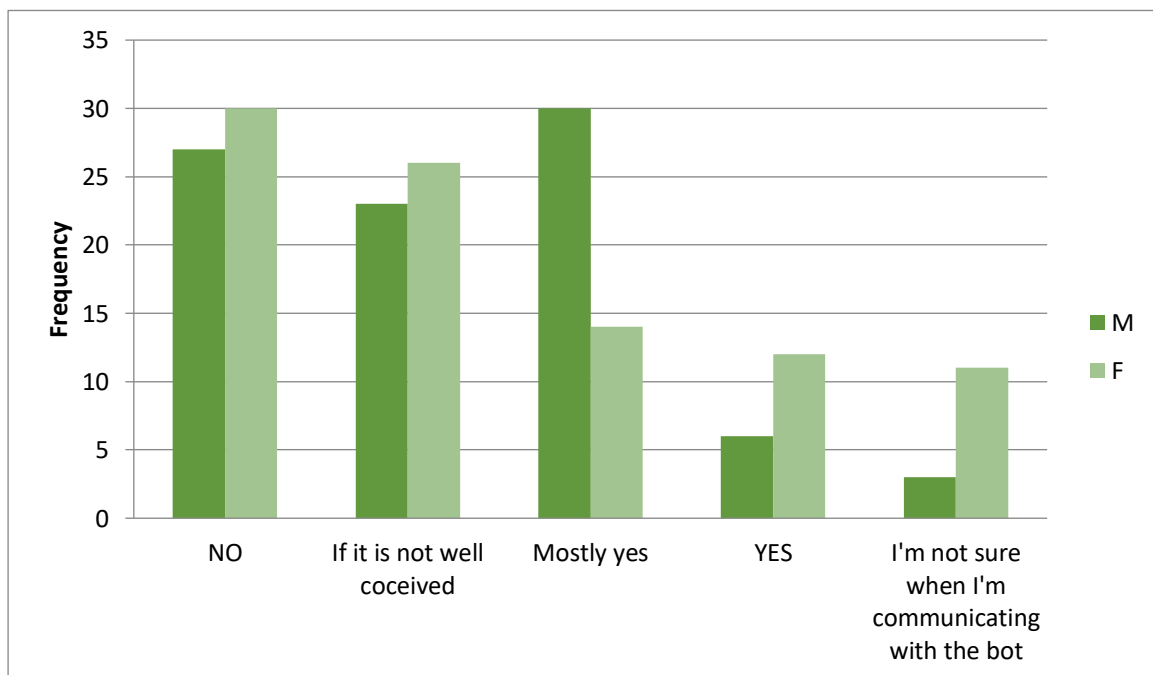
Based on this question, the following answers to the questions were obtained: the answer to leisure was given by 10% of men and 11% of women, the answer to a certain emotional state was given by 7% of men and 10% of women, the real need was answered by 57% of men and 64% of women, money 13% of men and 7% of women, none of the above answered 13% of

men and 7% of women. From this question, we have two surprising data, and that is that women buy out of necessity and that men mostly buy when they have excess money.



Graph 4: What motivates you to shop online? (Empirical research)

Based on this question, the following can be seen. The answer did not agree at all was given by 17% of men and 6% of women, I disagree is 27% of men and 26% of women, the answer is neither agreed nor disagreed was given by 17% of men and 34% of women, I agree answered by 23% men and 26% of women and the answer I completely agree was given by 17% of men and 9% of women. Here we can see how men react more intensively to advertisers via the Internet and how they feel that they are endangered in their free action through social media.



Graph 5: What motivates you to shop online? (Source: Empirical research)

Based on this question, the following answers were obtained: the answer was not answered by 27% of men and 30% of women, the answer that if it is not well conceived was answered by 23% of men and 26% of women, the answer was mostly answered by 30% of men and 14% of women and answer I'm not sure when I'm communicating with the bot 3% of men and 11% of women answered. From these data, we can conclude that men do not like to communicate via chatbots to a greater extent than women.

4. CONCLUSION

There is no doubt that the basics of marketing practice have taken some new forms today. Overall digitalization, but also lifestyle changes have led to new solutions in all areas of business, including the marketing segment. This poses a challenge not only to young marketers but also to consumers. Consumers are in an environment where a lot of information is present, where they can react quickly but also have to be computer literate. Personally, we believe that the new marketing techniques have contributed to the improvement of the company's business, but also to the concept of "personalization" where every customer feels that he is at the center of events. 100 respondents participated in this research, 30% men and 70% women, and we can draw several conclusions from the above. The first is that Facebook is still very much present as a place where consumers browse their products. Second in line is Instagram which is extremely popular. Following this, there are controversies as to the extent to which Facebook can be used for these purposes without consumers feeling threatened, according to recent allegations, there are already rebellious messages from consumers who believe that the basic meaning of this social network is being lost. The research addressed the question of what motivates people to buy online and based on which we can see that the real need is the main driver for such action, which we can confirm Hypothesis 1: The real need is what encourages consumers to buy regardless of the use of digital marketing channel. Also, when asked whether you think that social networks have become the subject of aggressive advertising, 43% of women and 54% of men answered positively, and we can completely reject Hypothesis 2: Social networks are not the subject of aggressive advertising. With this work we tried to help other researchers and marketing experts to gain new insights into consumer behavior on new advertising platforms, which can be based on deeper and more extensive research but also the basis for creating new marketing solutions that will succeed in reaching consumers. in the best way to achieve the ultimate goal of advertising and that is buying. This study included a relatively small number of people who are 100 but due to time constraints it remained so. The research was related to the area of Croatia and we believe that for future research should be limited to research in certain municipalities and with a larger sample. We conclude that consumer behavior is a discipline that will certainly take new forms in the modern marketing environment and that it is necessary to follow all trends in order to understand consumer psychology.

LITERATURE:

1. Chaffey, D., Chadwick-Ellis, F., Mayer, R., Johnston, K. (2009), *Internet Marketing: Strategy, Implementation and Practice*, Fourth Edition, Harlow: Pearson Education Limited, pp. 10.,
2. Čičić, M., and Husić, M., and Kukić, S. (2009), *Ponašanje potrošača*. Mostar: Sveučilište u Mostaru, pp. 16.,
3. Janko, A. (2017), *Optimizacija aktivnosti digitalnog marketinga*, Zagreb: Sveučilište u Zagrebu, pp. 9.,
4. Kesić, T. (2006), *Ponašanje potrošača*, Zagreb: Opinio d.o.o, pp. 5.
5. Milić, M. (2018), *Ponašanje potrošača*, Banja Luka: Univerzitet za poslovni inženjering i menadžment, pp. 35.

6. Nićin, S. (2014), *Istraživanje tržišta*, Banja Luka: Markos,
7. Perić, I. (2006), Prednosti i nedostaci ankete (metodološki esej), Sveučilište u Splitu, 1-2.
8. Schumann, J.H., von Wangenheim, F., Groene, N. (2014), *Targeted Online Advertising: Using Reciprocity Appeals to Increase Acceptance Among Users of Free Web Services*, Journal of Marketing, Vol. 78., Issue 1., pp. 60.,
9. Živković, R. (2006), Ponašanje potrošača, Beograd: Univerzitet Singidunum, pp. 42
10. https://en.wikipedia.org/wiki/Digital_marketing
11. https://en.wikipedia.org/wiki/Social_media_marketing
12. https://hr.wikipedia.org/wiki/Optimizacija_web_stranice
13. <https://www.mreza-mira.net/vijesti/razno/sto-su-hipoteza-i-teorija/>
14. https://www.dzs.hr/Hrv_Eng/publication/2020/09-01-01_01_2020.htm

RATING SYSTEMS - OPEN MANAGEMENT CONCEPT

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ABSTRACT

Achieving the target conditions for the functioning of organizations, socio-economic systems is inextricably linked with increasing the efficiency of individual performers. The most important role here is played by the issues of integrated performance assessment, rational choice of metrics. In other words, any assessment system should embody the well-known paradigm of the process approach - effective management is possible only with qualitative measurements. Initially, any rating system should provide some degree of freedom, which allows you to quickly adapt to changing operating conditions. The article considers the issues of creating rating systems based on the concept of open (agreed) management. We consider the architecture of a mutable system, focused on the use of flexible software development methodologies in which the main subsystems interact with each other through interfaces. The main idea is to use a two-stage procedure for reconciling metrics and objects of activity at each reporting period of the system. On the one hand, this approach allows us to refine and specify the metrics used in the new planning interval, taking into account previous experience. On the other hand, in the control loop there is a feedback with the direct executors who form applications to the center, according to their needs, wishes and preferences. The system evolves, at each new stage of its activity, new elements and conditions are introduced that allow updating past experience in a new planning interval. Thus, the performers are directly involved in the formation of corrective actions. The purpose of using open control elements in rating systems is to create an architecture of a changing system, where the main participants are motivated to make changes. Changes are necessary because human, socio-economic groups are in motion and constantly evolving.

Keywords: *rating system, performance, concept of coordinated management, concept of open management, performance evaluation, multi-level system*

1. INTRODUCTION

The effectiveness of the functioning of human collectives is closely linked to a rational assessment of their activities. Design and process activities imply at a certain final stage a set of metrics [1] by which further management decisions are formed. Most often, when managing human collectives, metrics characterize quantitative indicators related to the performance of a

certain amount of work by performers and units (a group of performers). Far from always, industrial systems for rating activities and incentives take into account the administrative hierarchy of organizations that change at each period of the planning of needs, when performing calculations and reporting. In practice, systems adapted to specific business processes play an important role. One of the most important management functions is the control and approval of all applications of subordinate units by direct managers, which can be reflected in the coordination mechanisms built into information systems. The authors consider elements of the theory of management of organizational systems, typical structures of organizations, the concept of open (coordinated) management [2] and its specification in relation to the construction of rating systems on an industrial scale. Particular attention is paid to the construction of multi-level systems with role-based access, where the main emphasis is on the implementation of a phased procedure for the coordination of both individual metrics [1] and performance indicators in general. The authors proposed the architecture and implemented a software implementation of the system for assessing the activities of the faculty for the Siberian State Industrial University, using the concept of coordinated (open) management. The completed developments are of practical and scientific importance, because they can be used in managing human groups in various fields of activity.

2. BASIC ORGANIZATIONAL STRUCTURES AND THE CONCEPT OF OPEN CONTROL

For most practical cases, two multi-agent organization systems (MOS) structures are ideal. A tree-like multi-agent system with a single root of A-type, built according to the hierarchical concept, is typical for most organizations with a single managing center.

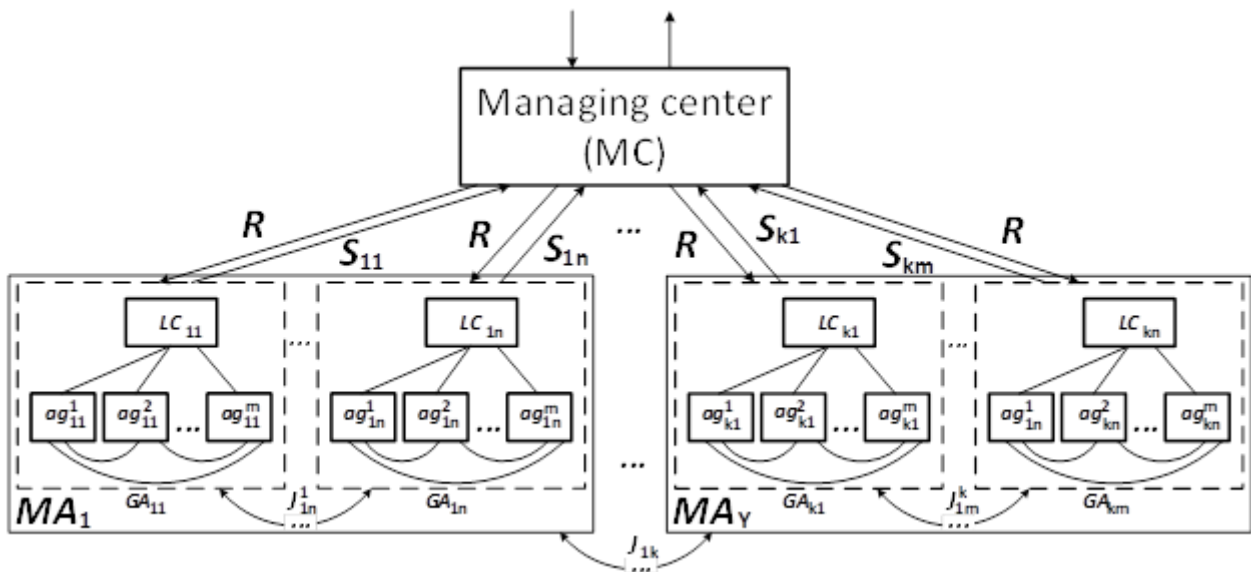


Figure 1: A-type MOS circuit

Designations in the figure include: MC- managing center; $LC_{11}, \dots, LC_{1n}; LC_{k1}, \dots, LC_{km}$ - local centers of the agent group; $ag_{11}^1, \dots, ag_{11}^n, \dots, ag_{1n}^1, \dots, ag_{1n}^m$ - agents belonging to groups of the first category; $ag_{k1}^1, \dots, ag_{k1}^l; ag_{km}^1, \dots, ag_{km}^s$ - agents belonging to GA_{11}, \dots, GA_{1n} groups of γ - category; MA_1, \dots, MA_γ - sets of group agents of the 1st, \dots , γ th category; R- schedule of work

of the MOS; S_{11}, \dots, S_{km} - information from agents to MC; $J_{1n}^1, \dots, J_{1m}^k$ - information exchanged by group agents; J_{1k} - information exchanged between multiple MA_1, \dots, MA_γ agents.

B-type MOS network characterizes a significant variety of control links and is suitable for distributed structures. B-type MOS network characterizes separate “control centers” - local centers; each of them submits a certain subset of performers. Information flows between local centers are formed in the order of subordination of one element to another, in other words, constructed according to the hierarchical concept of the MOS, is a special case of more complex systems with arbitrary connections. Modeling the organizational and informational structures of socio-economic systems, taking into account the various nuances of their interaction with other systems and using the mathematical apparatus of game theory [3], is associated with significant difficulties. First of all, difficulties arise due to a significant variety of interaction scenarios between individual elements and participants of the systems, taking into account more scenarios in practice, ultimately leads to an unlimited growth in machine computing. B-type MOC network is suitable for conditions where the management is carried out by separate independent entities, for example, shareholders on the board of directors, see Figure 2.

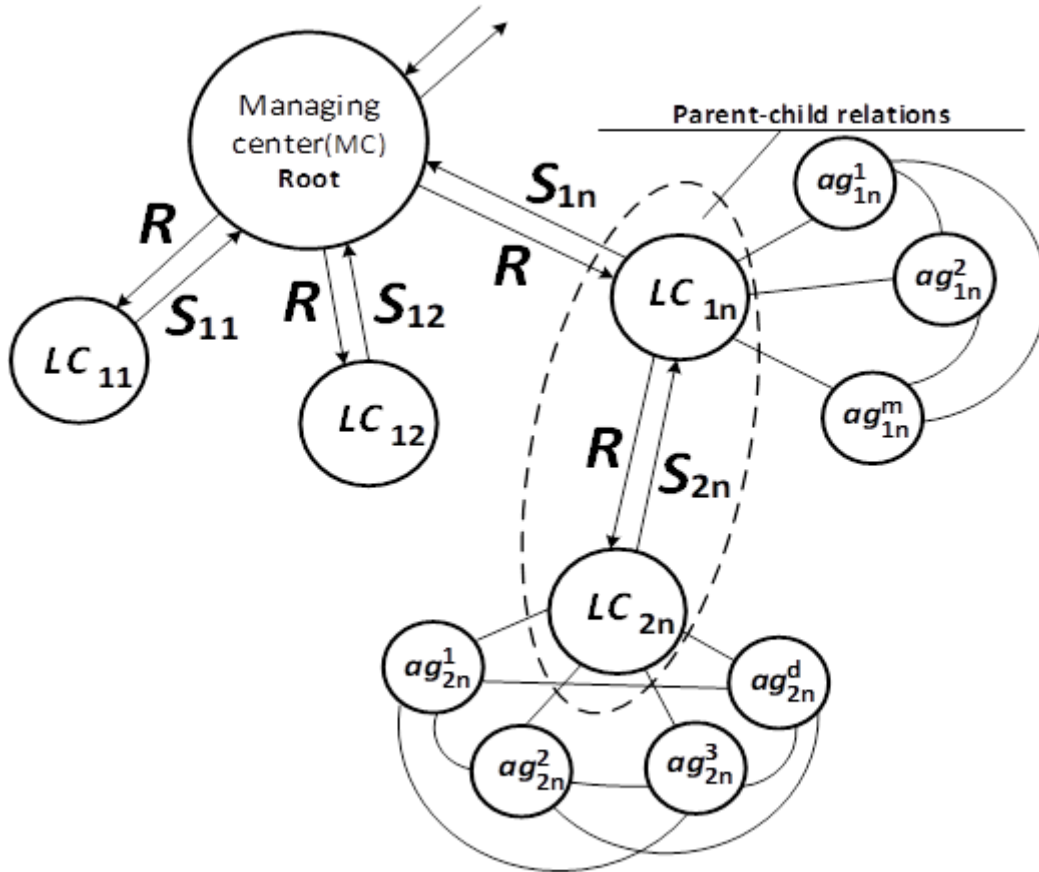


Figure 2: MOS scheme of B-type (“semantic” network)

Designations in the figure include: MC - managing center; LC_{1n}, \dots, LC_{2n} - local centers are connected with each other by the relations “parent” - “child”. All agents on $ag_{1n}^1, ag_{1n}^2, \dots, ag_{1n}^m$ at the same level of the local center LC_{1n} are connected to each other by channels of

semantic communication or verbal communication. Interaction scenarios between individual participants can be described using recurrence relations and tree traversal algorithms. Within the framework of theories of active [4] and organizational systems [2], a set of management tools has been developed as applied to the class of two-level single or multi-agent organizational systems. However, a number of difficulties arise in practice, since real systems, as a rule, are multilevel. The main distinguishing feature of these tools is the idea of coordinated management, which allows the management center to form control actions taking into account the target functions (preference functions) of agents subordinate to it. Let us consider one of the most important tools of the theory of management of organizational systems in active systems, namely the concept of open (coordinated) management from the point of view of the possibility of its application in modern rating systems. The typical two-level multi-element active (organizational) system considered in the theory of active systems has the form shown in Figure 3. Obviously, the development and implementation of real systems in practice should include the use of N-levels of management.

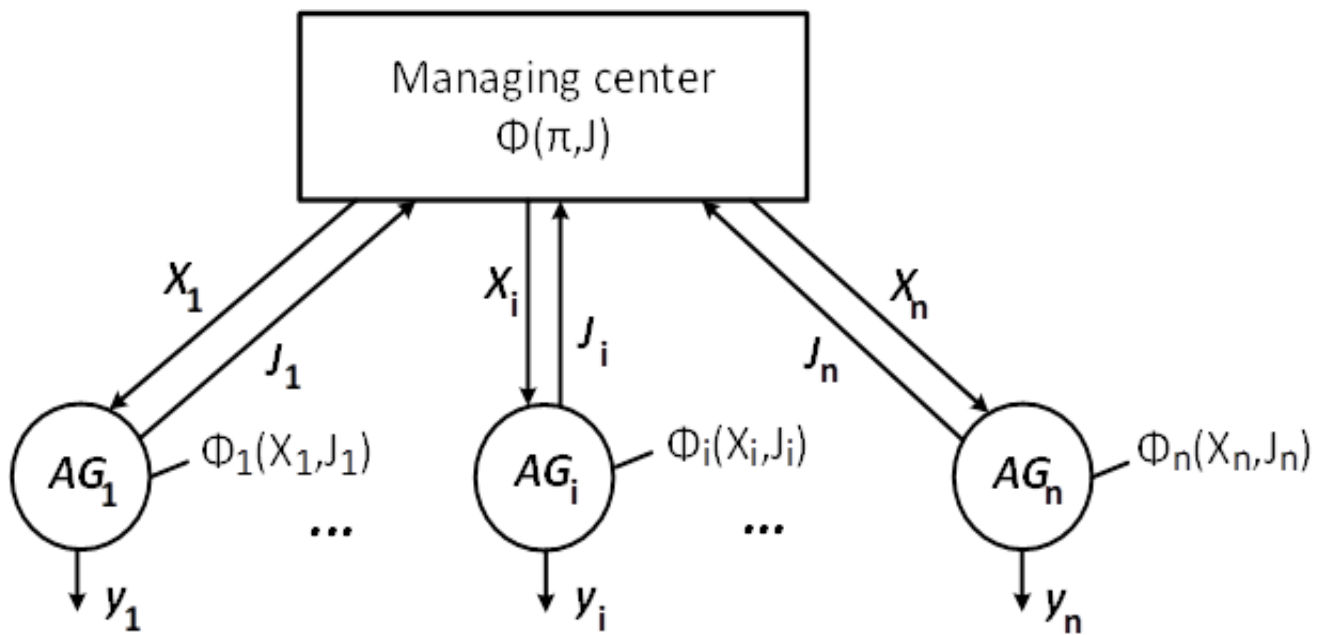


Figure 3: The structure of two-level active (organizational) system

The following designations are indicated in the figure: $x_1, \dots, x_i, \dots, x_n$ - plans established by the center (from among the admissible plans x_j) for agents $AG_1, \dots, AG_i, \dots, AG_n$; $\varphi_1(x_1, J_1), \dots, \varphi_i(x_i, J_i), \dots, \varphi_n(x_n, J_n)$ - preference functions of agents; $\Phi(\pi, J)$ - objective function of the center; $J = (J_1, \dots, J_i, \dots, J_n) \in \Omega = \prod_{i \in N} \Omega_i$, $i \in N$ - vector of information (messages) from the agents that center needs for planning; $N = \{1, 2, \dots, i, \dots, n\}$ - set of agents; $y_1, \dots, y_i, \dots, y_n$ - actions (results of activities) of agents $\{AG_i, i = \overline{1, n}\}$. The concept is briefly described in Figure 3. The planning mechanism π_i implemented by the center establishes the compliance between the plan x_i and the vector of messages J received from agents $ag_j \in \overline{AG}$:

$$x_i = \pi_i(J) \in X_i, \text{ where } \pi_i = \Omega \rightarrow X_i, i \in N; \Omega_{i \in N} = \prod \Omega_i \quad (1)$$

The concept of open (agreed) management is such a planning procedure that maximizes the objective function of the center on a set of plans that correspond to the condition of perfect coordination:

$$\varphi(\pi_i(y), J_i) = \max \phi_i(x_i, J_i), i \in N, J \in \Omega, x_i \in X_i(J_{-i}) \quad (2)$$

where $X_i(J_{-i})$ - set of acceptable plans x_i for a given situation $J_{-i} = (J_1, \dots, J_{i-1}, \dots, J_n)$ in the system for the agent AG_i , $i \in N$. It is proved [9] that the application of the concept of open control makes each agent give reliable information to the center as the main (main) strategy for informing the center. The important aspect of using the concept of open (coordinated) management in rating systems is the phased coordination of all metrics and business requirements at all stages of the rating assessment life cycle.

3. LIFECYCLE RATING ELEMENTS

Evaluation of the performance of individual performers in real production and socio-economic systems comes down to taking into account various indicators (metrics) over a certain period of time and generating reports for making managerial decisions. The most important requirement for such systems is the ability to continuously evolve over time, together with the changing requirements of managers, business units and management structures. Simultaneously developed, “monolithic” systems freeze deep in time, like ghosts from the past and, in the best case, undergo constant redesigning and changing of program code (as performers are searching for new ways to increase the rating), which ultimately leads to a sharp increase in costs at later stages of the life cycle [5]. Obviously, already at the stage of design and development of rating systems, requirements related to time-varying assessment methods should already be laid down, which will allow the system not to lose its relevance after many years. The authors propose an approach based on an incomplete iterative model of the life cycle [8], for requirements and rating systems that change at each reporting period, within each iteration of which a two-stage coordination of needs is provided. Consider the structure of one iteration, in the reporting time interval, which includes the intervals and, also, the time required to generate reports and make decisions, see Figure 4.

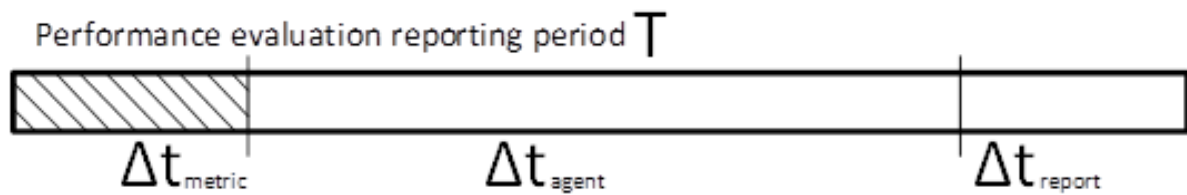


Figure 4: The structure of the iteration of the rating system performance assessment

At the first stage (interval Δt_{metric}), the local center asks agents for information J_{metric}^{itr} on the preferred performance metrics for individual performers and their weights in the future period, or forms a list according to their preferences based on their preferences. The second stage (interval Δt_{agent}) provides for the introduction of agents into the system of objects of activity, on the basis of which reporting is subsequently generated for management decisions. The center asks the performers for information on the results of the activities J_{agent}^{itr} , the threshold processing mechanisms form aggregate groups of performers performance.

Such an approach leads to increased competition between individual employees of the organization, the refinement of quantitative and qualitative indicators of metrics, to achieve the goals of the organization.

4. VARIABLE RATING SYSTEM ARCHITECTURE

Consider the architecture of the rating system, focused on supporting all of the above concepts. The basis of such systems is the object (resource) - role mechanism. Each level of the rating system represents one or a set of roles in the decision tree and contains a set of interchangeable hardware and software subsystems associated with a specific role. At the lower level of performers, direct registration of objects of activity of employees is carried out. The ability to replace individual components of the system during operation is provided through the use of dependency injection containers [6,7] (Ninject, Castle Windsor). The architecture of the variable system is shown in Figure 5.

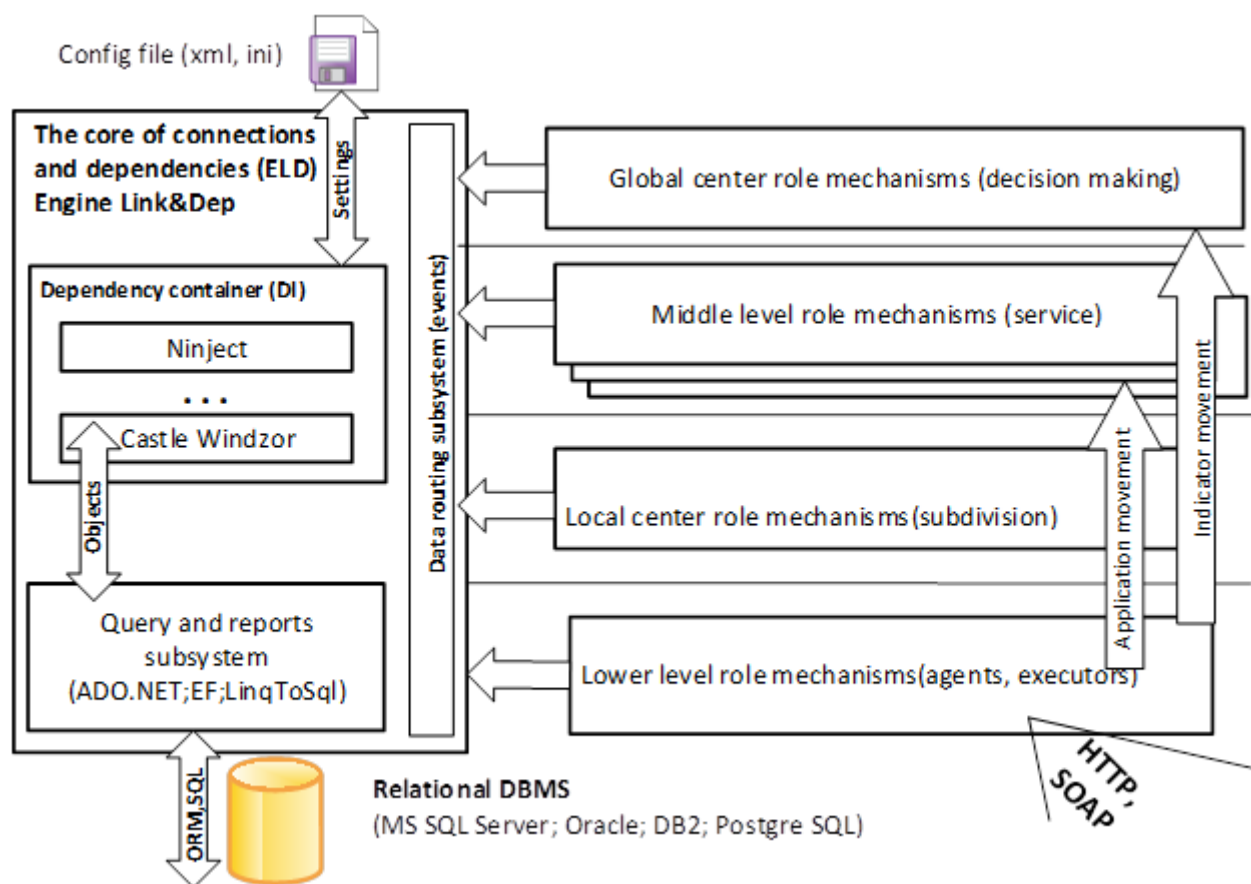


Figure 5: General architecture of a variable rating system

The ideas, approaches and principles set forth in this article were reflected in the rating system for monitoring the effectiveness of the faculty of Siberian State Industrial University (SibSIU) [9] (copyright certificate No.). The system provides many different roles that aggregate different functionality. The approval by the higher level of applications of performers is carried out in accordance with the principle of open (agreed management). The architectural principles inherent in the system reflect the idea of multi-level coordination of indicators for calculating the rating and approval of objects. Summarized, there are six levels of system operation, see Figure 6:

- 1) Employee level. At this level, applications related to the registration of objects of activity are formed. Applications (depending on type) are routed to the role of “Librarian” or

- “Patent”, which carries out their initial verification and approval. Further approval of the facilities is carried out at the level of the department head.
- 2) The level of initial registration of objects. It is implemented by the mechanisms of the roles “Librarian” and “Patent”, depending on the type of application (patents and copyright certificates for software are approved by patent experts). Approved objects are routed to the level of the department head.
 - 3) The level of head of the department. It approves the objects formed by individual employees of the department, forms the numerical values of general department performance indicators, approved by the directors of the institute.
 - 4) The level of director of the institute. It approves performance calculation indicators introduced by department heads. Generates the numerical values of the performance indicators of institutes, which are approved by the university administration.
 - 5) The level of administration of the university. Approval of indicators, management decisions. View performance indicators and ratings in various information “slices”.
 - 6) Level of full access. Access to all system features. Perform any actions.

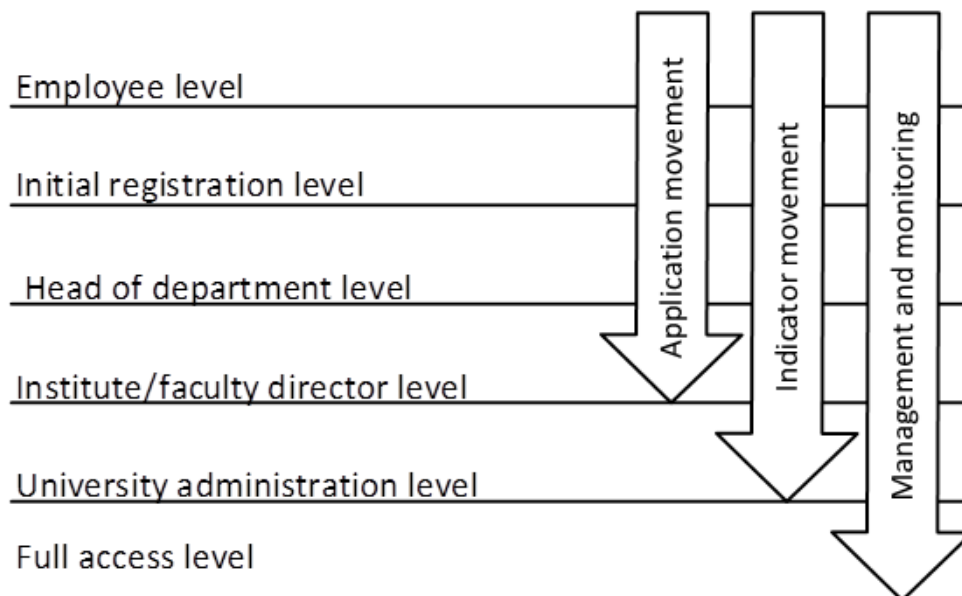


Figure 6: The conceptual scheme of the rating system of SibSIU

5. CONCLUSION

As a result of the work, the authors proposed the architecture of a variable rating system, which allows you to use a different set of metrics for each reporting interval (agreed with the contractors), as well as take into account the needs of people to optimize their activities. The scientific novelty is the thesis that it is necessary to use a two-stage procedure for reconciling both the metrics themselves in the reporting interval and the objects of activity in rating systems. The results of the work can be used to create high-quality systems for supporting management decision-making in the framework of production, socio-economic activities, focused on achieving set goals and success in the competition.

LITERATURE:

1. Bruks, Piter. Metriki dlja upravlenija IT-uslugami.: Al'pina Pabliher, 2008. – 288 s.
2. Novikov D.A. Teorija upravlenija organizacionnymi sistemami. M.: MPSI, 2005. – 584 s.
3. Teorija igr i jekonomicheskoe povedenie / O. Morgenshtern, Dzh. fon Nejman – M.: Kniga po Trebovaniju, 2012. – 708 s.

4. Burkov V.N., Novikov D.A. Teorija aktivnyh sistem: sostojanie i perspektivy. M.: Sinteg, 1999. – 128 s.
5. Skopin I.N. Ponjatija i modeli zhiznennogo cikla programmnoho obespechenija: Uchebnoe posobie Novosib. gos. un-t. - Novosibirsk, 2003.
6. Simon, Mark. Dependency Injection in .NET - SPb: Piter, 2013. - 464 s.
7. Bek K., Fauler M. Jekstremal'noe programmirovanie: Planirovanie // Biblioteka programmista SPb.: Piter, 2003.
8. Dobrynin A. S. Model' nepolnogo zhiznennogo cikla programmnoho obespechenija / A. S. Dobrynin, R. S. Kojnov, S. M. Kulakov // Vestnik AGTU. Serija: Upravlenie, vychislitel'naja tehnika i informatika. – 2015. – № 2. - S. 65-69. – Bibliogr.: s. 69 (9 nazv.).
9. Certificate of state registration of the computer program No. 2014662362 Russian Federation. System for monitoring the effectiveness of the university / Lyakhovets M.V., Koinov R.S., Milovanov M.M., Dobrynin A.S. ; copyright holder Sib. state industrial un-t. - No. 2014660244; declared 10/09/14; register 11/27/14. - 1C.

MOROCCAN FOLK STORIES: A SOCIO-CULTURAL PERSPECTIVE

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ABSTRACT

Folk stories/tales are artistic creations transmitted from one generation to another and kept alive by active tradition bearers, usually parents, grandparents and professional storytellers; they give a sense to people's lives and reveal the hidden part of human genius. The present article examines folk stories in the city of Errachidia, south east of Morocco, from a socio-cultural point of view. To be more precise, it tries to get insights into how these artistic creations, (i.e. folk stories) reveal the complex cultural values and linguistic systems in this semi-rural area and how people use these stories to create and maintain socio-cultural constructs.

Keywords: *Culture, construct, Sahrawi community, folklore, linguistic, artistic creations, values system*

1. INTRODUCTION

The aim of folklore is to re-establish the history of the intellect of human beings, not as it is portrayed by great writers and intellectuals, but as it is shown through ordinary people's voices and expressions which, though often repressed, appear to be more accurate, faithful and informative of those people's real conditions and grievances. Folklore, then, is concerned primarily with ordinary and unlettered peoples' verbal as well as non-verbal traditions and behavior, including, among other things, various genres of popular arts, namely proverbs, ritual utterances, artifacts, folk songs and folk stories. Folk stories, the subject matter of this paper, can be defined as popular creations, constituting part of people's oral traditions and cultural heritage (Guibbert 1985: 23-4) and reflecting their imaginations and beliefs. Brunvand (1959:15) defines folk stories as strictly fictional "traditional prose narratives" which are told primarily for entertainment and which portray fantastical events in a realistic way. A face-to-face interaction, according to Hudson (1980: 106), is a situation where one person talks to another whom they can see and who is close enough to hear them. Storytelling is, therefore, a kind of face-to-face interaction in which the storyteller tries to transmit linguistically a set of extra-linguistic experiences in the form of discursive acts (Boukous 1977: 295). In the present article, we examine folk stories in the region of Errachidia (Morocco) from a socio-cultural and anthropological point of view. We try to uncover and elucidate how people in this small semi-rural community use their artistic creations to communicate within their speech community to build and maintain socio-cultural constructs and values and how these creations reflect the social and linguistic systems of the Sahrawi community in this region. Popular oral literature, of which folk stories are a basic part, are agonizing and vanishing, for they are being overshadowed by a more formal and sophisticated kind of literature, and the more sophisticated media and technology. Such a reality appears to be the result of the introduction of the modern means of education which the French colonizer imposed to help convince local people that their culture and values were primitive and useless on the one hand, and the emergence of modern information and communication technologies (ICTS) on the other hand, a fact which has resulted in peoples' losing faith, as it were, in their folklore and ultimately calling its relevance into question. The choice of this particular topic particularly in the region of Errachidia is attributable to subjective and objective reasons. Concerning the subjective reasons, the region under study is our home town and it incarnates our childhood with its ups and downs, its heights

and depths and in-betweens; and researchers, it is said, are usually tempted to go back to their origin and try to probe and uncover some of the issues that ‘captivated’ their childhood and for which they could not account at the time. As children, we remember the family gatherings around a big fire during which our parents, grandparents, uncles and aunts told stories while dinner, if any, was being cooked. It was not until we started our investigation of these stories that we got to understand that the storytelling was not an end in itself but a means to an end. In other words, the telling of folk tales per se was resorted to just as a ‘psychological outlet’, as it were, or a means to make us forget about the difficult economic and climatic conditions and also to cope with life despite all its pricks, such as hunger, cold and other hardships. We, moreover, believe that belonging to this region will certainly make our task relatively easier to better understand people, given that we are familiar with it and we speak more or less the same variety with all that this entails. As for the objective reason, this region hosts a relatively traditional community and consists of small, closely related villages in which people are less exposed to modern cities and are ultimately less liable to experience cultural change rapidly, especially knowing that folklore flourishes and thrives most widely in rural areas. However, this does by no means imply that folklore is exclusively rural; instead, it possesses a “remarkable vitality even among urban dwellers, who are experiencing rapid cultural change” (Encyclopedia Americana VI: 65). These stories are being challenged by the modern means of entertainment, mass media and modern information technologies and are, therefore, doomed to extinction. This very fact is one of the main concerns of anthropologists and sociologists. This work, we believe, is also important because it combines two aspects of life in the south east of Morocco, namely the ‘oasis and Ksour environments, a feature that can’t be but enriching and inspiring.

2. METHODOLOGY

Folk stories cannot lend themselves to one single approach or discipline; instead, they should be examined from an interdisciplinary perspective. In fact, such studies fall within the realms of anthropology, sociology, linguistics, among others. This being the case, the present study makes use of the tools of anthropology, or more particularly anthropological linguistics and linguistic anthropology to approach these stories, the language used and the social constructs, i.e., the ideas and concepts collectively created, cultivated and maintained by members of the community to counter the inherently and naturally existing facts. These social constructs are related to class distinction, ethnicity, gender differences, linguistic distribution and a plethora of other social and natural phenomena, as will be made clear below. We have drawn the inspiration, as it were, for this piece of work mainly from field work, our experience, our career path and our childhood spent in such a place full of intriguing things that only Chinwa Achebe’s rich descriptions of African villages in his novels can match. The region is part of what the French, “with fine colonial candor, used to call le ‘Maroc inutile’ [i.e., useless Morocco], the forts and oases of the pre-Sahara, the walled-in rivers and pocket plateaus of the High Atlas (Geertz, 1968:5). The work of an anthropologist, as Geertz (1968) has rightly stated, is but an expression of their experience or how they have been impacted by their research. Living and growing up in such an area proved to be very formative (intellectually and personally). Most insights, explanations and interpretations of events in the collected stories grew out of field work and more precisely through the contact and/or interaction with the respondents, i.e., the storytellers, especially the elderly. The collection of the data to carry out this research was not without its problems. To be able to record stories and interview people freely required getting the permission from both local authorities and storytellers alike. Permission from the authorities to prove that the study did not have any political dimensions and that it was being carried out for the sake of academic research and only research. The permission from the storytellers ties in with the ethical practices of doing research.

The storytellers were told that the recorded and/ or collected stories would be used as data for research work. Face to this, we confined ourselves to some respondents who were willing to cooperate, namely members of our own families, relatives, neighbors and friends' families. However, some of these respondents, females in particular, showed a great deal of reluctance to tell stories at first, pretending that folk stories were outdated and were not worth being the subject matter of academic or scientific research studies. After having explained everything to them, they eventually accepted to narrate stories provided that they were not recorded. Others, on the other hand, were willing to tell stories regardless of whether they were recorded or not. We, therefore, managed to record twenty stories and write down some others as they were being recounted when recording was not possible. It should be clear that the stories under study were recorded between 1985 and 1986 within the framework of the writing of our BA research project.

3. ANTHROPOLOGY, LINGUISTIC ANTHROPOLOGY AND ANTHROPOLOGICAL LINGUISTICS

As part of the social sciences, anthropology is often defined as the study of human groups and cultures. It is a unique field of study, for it sets for itself the task or project to investigate the claims and contentions put forward with regard to nature, cultures and humans and all this is done based on a 'four-field approach' (Scrupin & DeCourse, 2017). Anthropology, it should be noted, falls into four major subfields, i.e., linguistic anthropology, socio-cultural anthropology (sometimes called ethnology), archaeology, and physical anthropology. Each of these subfields addresses human and linguistic phenomena from a different angle; however, if these subfields are combined, they provide a global and holistic view on the phenomena under study (Scrupin & DeCourse, 2017). The main and distinguishing characteristic of anthropological studies is the investigation and research of the subtleties and slippery aspects of human culture. The method of study that is adopted by anthropologists and that makes anthropology different from other researchers is ethnography, i.e., the qualitative and in-depth analysis of why and how given aspects of culture, including verbal and non-verbal behaviors occur (Goldman & Borkan, 2013). The use of an ethnographic method enables researchers to lay bare the insights arrived at by analyzing specific phenomena from different points of view. To achieve all this, ethnography has recourse to different data collection methods, namely observation, interviews, focus groups and textual analysis in a bid to build a global view on the phenomena being studied and formulate general concepts and constructs about them. The reliability of such methods stems from the fact that they combine information as to people's thoughts and attitudes (i.e., beliefs) and that arising from observation of what these very people do in their recurring interactions (i.e., behavior) (D'Andrade, 1995; Duranti, 2003). As has already been stated, each of the sub-fields of anthropology is concerned with a specific field. For the purpose of the present study, we will confine ourselves to linguistic anthropology and cultural anthropology. Linguistic anthropology is more concerned with the development of human language, and the issues pertaining to the relationships between language and culture. They try to investigate how language, the uniquely human feature, is used among communities to communicate. Social and/or cultural anthropology, on the other hand, delves into the study of the cultural and value systems that help distinguish societies and cultures from each other, particularly the organization patterns prevailing in these societies (Tuttle et al, 2019). In linguistic anthropology, it is argued, the production of discourse by human beings via the uniquely human endowment, i.e., language, is one of the fundamental tools that help these humans create culture and social life (Tuttle et al, 2019; Scherzer, 1987). Through observing and investigating naturally and socially occurring speech exchanges, researchers try to identify how different communities construe different speech acts, such as complimenting, criticizing, ordering and expressing politeness and how their interpretation of these speech acts can and do affect

research carried out on such communities. A key issue that linguistic anthropology tries to address is whether and how language, and ultimately, cultural differences impact the way users of those languages perceive and understand the world; in other words, it investigates how language determines the modes of communication and modes of thought, forms of social identity, common cultural ideology and representations of natural and social phenomena. (Whorf, 1956; Kira & Bucholtz, 1995; Duranti, 2003; Bauman, 1977; Taylor, 1973; Maliki et al, 2019). In linguistic anthropology, there is a distinction between “anthropological linguistics” and “linguistic anthropology”. While the former is concerned with language documentation, the latter addresses theoretical issues of language use in context (Duranti, 2003). A third sub-field of linguistic anthropology focuses on the study of cultures using linguistic tools and laying emphasis on issues, such as personal and social identities, shared ideologies and common sense as well as narratives taking place during interactions between individuals and social groups sharing the same cultures and modes of communication (Rings, 1987; Kaihara, 1974; Parker, 1976).

4. THE CULTURAL ASPECTS OF FOLK STORIES

Culture is defined as the knowledge which someone has by virtue of their being a member of a particular society" (Lyons 1981: 302). Such knowledge is acquired by the individual through their interactions with other members of their speech community. According to Rivers (1981), there is a major distinction from which the other definitions evolve. This distinction is made between ‘Large C’ and ‘Small C’ cultures. In view of the former, culture is used in a restricted sense to indicate what people often regard as civilization, in which case it is presumed to include technological, geographical, economic and political aspects of a society as well as sophisticated tastes in the fields of literature and art in general. This view of culture can be clear from the following statement by Rivers (1981:316), who argues that culture is seen as a “training which tends to develop the higher faculties, the imagination, the sense of beauty and intellectual comprehension.” In a similar way, Pei (1956:206) states that culture, for the layperson, is taken to designate “a mark of superior literary or artistic achievement or even superior breeding.” Implicit in these two statements is the assumption that culture is an asset that only civilized societies as opposed to, say, primitive ones, can have access to or can be described as having. Contrastively, the term culture, as used by sociologists and anthropologists (Kaihara, 1974; Harms, 1973; Ting-Toomey, 1985; Romney et al, 1986; Moreman, 1988) has a more or less broad significance and can be described as an “omnibus definition’ or view (Spradley, 1972), in the sense that it considers culture as almost everything belonging to a group of human beings (i.e. a speech community). It is by no means something reserved solely to developed or civilized societies, as it were, but something that every aggregation or group of people, however underdeveloped or primitive they may seem to be, possess. Culture, in this sense, refers to the entire body of behavior, traditions, beliefs and ways of living that are learned through and via the process of socialization (Robertson, 1987; Tailor, 1973). In this respect, Spradley (1972:8-9), citing Goodenough, states that a “society’s culture consists of whatever one has to know or believe in order to operate in a manner acceptable to its members and to do so in any role they accept for any of themselves.” Robinson (1985) holds that culture should be regarded in terms of a series of diverse categories. The first category (i.e., that of ideas) comprises beliefs, values and institutions. The second category (i.e., that of behaviors) includes verbal and non-verbal language, customs, habits, rituals. Finally, the category of products consists of artefacts, folklore and other artistic creations. These categories differ in their level of abstractness and observability. Unlike the last two categories (i.e., behaviors and products) which reflect culture as observable phenomena, the category of ideas reflect culture as something internal that can be explicitly described through inference. In principle, it is ideas that give birth to norms or actions, be they verbal or non-verbal, and not the reverse.

Underlying any external, observable behavior or phenomenon, there lies an internal force, or what Spradley (1972) calls an “ideal form”. An utterance taunting somebody for violating a certain taboo is necessarily induced by an underlying principle that forbids overt violation of that taboo. Taylor (1973:28), has rightly explained that “given utterances, actions or artefacts cannot occur or exist except as the result of counterpart forces or conditions internal to a specific person”. A mother, for instance, will not rebuke her child for not kissing their grandfather’s hand unless she has the idea that the child should do this and that it is proper to rebuke them for not performing according to cultural expectations. To the extent that culture is mainly constituted of internal forces and ideal forms residing inside the cultural actor, it is reasonable to ask the following question: how do we manage to arrive to cultural elements for analysis? The answer is simple: to the abstract, general aspects of culture – values and principles – there are empirical clues, cues or indicators that represent the lower part of the hierarchical network or structure. Too often, empirical indicators are the observable behavioral patterns of people, such as, for example, their utterances. Language is a vehicle via which the other cultural aspects are conveyed. It is, thus, with the help of these empirical indicators that social scientists, sociologists, anthropologists and sociolinguists try to bring to the fore the underlying cultural assumptions and norms. Here, we would like to stress that a prerequisite of these empirical indicators is that they must be shared by almost all the members of the cultural group or speech community in question; they must be typical of the core cultural body of that group. If some behavioral patterns are unique and particular to individuals, they would be no more than personality traits. Culture is a collectively created system of meanings, a system that is shared among the members who contribute to social action on a regular basis (Feldman, 1986). We should, however, be cautious not to believe that finding out the underlying cultural principles is not without its problems. First of all, the same empirical indicator may be interpreted differently and may receive as many interpretations as there are observers. Second, one can hardly find a one-to-one correspondence between cultural principles and empirical cues. In addition to there being cultural patterns that can be easily inferred from observable behavior, there are others which often prove to be difficult, in so far as it is not at all certain whether or not they correspond to assumptions within members of the culture. The discrepancy between what is usually called ideal and real/actual cultural values is also worthy of mention here. An ideal cultural value is one which people strive for, but do not achieve; it is one which people adhere to in principle. They are traits and characteristics shown in language as what a society’s members do, believe or should do or believe, but which often appear to contradict what these people actually believe and do (Taylor, 1973:35). What people actually do, believe and adhere to in practice represents what is usually referred to as “real culture” (Harms, 1973; Robertson, 1987). The real/ideal culture dichotomy does not mean that ideal cultural values are less than genuine cultural phenomena and, therefore, have no influence on the individual’s behavior. It is important to remember that many individual ideas expressed in utterances about actions that are intended or supposed are as certainly integral parts of a society’s repertoire of learned and shared customs just as the ideas that are actually manifested in behavior (Parker, 1976). Ideal cultural principles, it must be stressed, do in effect have a degree of influence on people’s actions. Moreover, they can be, at least partly, reliable to account for the occurrence of some phenomena manifested by members of a given culture. Although culture comprises many components, one should be wary of considering it as something other than a coherent and systematic whole. Cultural values together with their empirical indicators represent an organismic integration made up of systematically patterned, intricately related and interdependent parts which supplement each other (Stewart, 1972; Condon and Saito, 1997; Stern, 1983; Ting-Toomey, 1985).

4.1. Language and Culture: What relation

A society's language, it is important to note, constitutes part of its culture and is a means whereby this culture is conveyed and expressed (Hudson 1980: 83). Although important efforts have been expended to give a satisfactory and exhaustive account of the relationship prevailing between language and culture, one is still faced with big controversies induced by the different accounts that represent contrasting theoretical perspectives. One of the 'classical' attempts to characterize the language-culture relationship is that put forward by Whorf (1956), known as the 'Sapir-Whorf hypothesis'. It is associated with the theory of relativity which argues that language determines a person's thought and world view, and that culture and thought are, therefore, dependent on language (Stern, 1983:202). In other words, Whorf (1956) claims that language does not serve as a means whereby communication is carried out and information given, but constitutes the means with which individuals think because it conditions cultural thought and perception. As Whorf (1956:212) himself points out, it is "the shaper of ideas, the program and guide for the individual's mental reality". He further notes that the different ways in which a specific language categorizes reality, impose on the mind ways of organizing knowledge, which, as Stern (1983:204) observes, makes the diversity of language not one of sounds and signs, but one of world view. Another view regarding the relationship between language and culture argues that language does not determine its speakers' cultural thought, but simply modifies it. When language, an aspect of its culture, is used, the other aspects of the particular culture crop up (Bentahila, 1983). In this respect, Gladstone (1972) clearly states that language and culture are inextricably intertwined, for language is both an outcome of the culture and a vehicle whereby the other facets of that culture are shaped and communicated. The language we acquire as children gives us a system of communication, and, more importantly, indicates the type and form of communication we make. Language and culture, then, are interwoven such that one cannot separate them without losing the significance of either language or culture. Although cultures tend to be similar in their general categories because human beings have the same biological and psychological characteristics and needs (Fiske et al, 2007), every culture is unique. This uniqueness can be explained in terms of the fact that each culture is created through the interaction of the members of a specific society overtime; even the so-called cultural universals are subject to cross-cultural variability and their content and implications vary from one culture to another. Like all societies, the Sahrawi society has got an inherited set of values and properties which make the body of its culture and which are reflected in people's speech and artistic creations. The storyteller, a member of this speech community, reflects the Sahrawi traditions and beliefs in their stories.

5. CHARACTERISTICS OF FOLK STORIES IN THE REGION OF ERRACHIDIA

Folk stories have been very close to man since old times, for they represented the chief means for recording and preserving history, especially in illiterate societies. According to Maugham, cited in Swanwick (2012), "the desire to listen to stories appears to be as deeply rooted in the human animal as the sense of property. From the beginning of history, men have gathered round the camp fire or in a group in the market place, to listen to the telling of a story". These stories were a basic part of man's traditional literature because "for centuries, most people-adults as well as children- received their literature by ear" (Encyclopedia Americana, V17: 560). People used folk stories to express their ideas, feelings and voice any grievance they had as to their everyday life and relations with others in the community, especially when direct expression of these grievances was not possible for social or political reasons. Like all other communities, Morocco, a country where the traditional educational systems and Koranic primary schools (Bentahila, 1983; Zine-Dine & Maliki, 2020), were predominant and served as the place where people received both their religious instruction and their cultural values orally, knew folk stories since early times.

Even nowadays, though modern means of education, entertainment and technology are available and easily accessible, folk stories seem to continue to survive. They reflect the expressions of the human spirit and convey what lies deep in man; written literature alone is not enough to help people discover the underlying nature of the individual and the springs of their unconscious side, for humans also need to lay bare “the unconscious realms and souls” (Utley, 1968:14) in order to explain some natural phenomena using their own logic and understanding, limited as these may be. Robins’ (1978:377) views that in small communities, certain people are charged to store these stories in their minds. These people are usually parents and grandparents or, at times, professional story tellers who have played the crucial role of tradition bearers. In Morocco, storytellers can be divided into two categories. The first category is represented by professional storytellers who use storytelling as a means of subsistence and a way to earn their living and who are usually found in public and market places in circles called /lhalqa/. Most of the time, these were wandering storytellers who collected old stories and polished, brodered and updated them for retelling in village and market places (Encyclopedia Americana V17: 560). Parents and grandparents represent the other category of story tellers. They tell their children stories they had heard as children or new ones they have created from their own experiences to entertain them, educate them and subsequently to introduce them to the most intricate side of their language and cultural values system. Before addressing Sahrawi folk tales, it is important to give brief account about the area in which they circulate, which will, undoubtedly, be of great help in the understanding of the present analysis. Errachidia is a small -to -medium town located in the south east of Morocco. It was formerly known as "Ksar Es Souk" (i.e., Kasbah and market place), and was renamed ‘Errachidia’ around 1975 in honor of the second son of late king Hassan II. It is characterized by its hot, desert climate, creating hot, arid, conditions with intense sunshine. In this region, it is generally hot, sunny and dry almost all the year. During winter periods, night-time temperatures can drop to freezing levels or below. There is not much rain because it is isolated by a chain of mountains (Fezza & Maliki, 2020). Added to this is the scarcity of fertile land. There are only small fields or agricultural land plots in the oasis stretching along the ZIZ Valley. Therefore, there is meager agriculture. The predominating crops are food or subsistence crops, such as date palm trees, olive trees, small-scale cereal crops, vegetables and some other crops, such as Lucerne or alfalfa, intended mainly for cattle raising (Lhourti 1983). People in the region of Errachidia, moreover, lead a traditional tribe-like life in small habitations called “ksours” or “Ksars”. These are a series of attached adobe houses together with other structures like mosques, public baths and souks (market places). Ksours are most of the time located in mountain areas and are entirely within a single, continuous wall to make their protection easier. They are unified by social institutions, such as family, marriage and other patterns of kinship. In other words, in the Sahrawi society, extended family members live in the same house, and the males, though married and have children, share the same roof with their parents; the phenomenon of cohabitation is astonishing, and in most houses the number of people is large, and the authority of the father is omnipresent and never failing (Maliki, 1991). Besides, in such small rural communities, as Mahjoub (1986.:3-4) has put it, people live in isolation from other areas; therefore, they are less exposed to other cultures and are ultimately less likely to experience rapid cultural change and modernization.

5.1. Place and Time of Narration

In the Sahrawi community, folk tales are usually narrated during the night, for night-time is perhaps the time when all members of the (extended) family are together. The narration of stories at night is also related to a superstitious belief that people hold, and according to which people who tell stories during day-time run the risk of having bald children. In fact, this superstition aimed to prevent laziness, indolence and idleness and to have people spend their

day-time working in their houses and fields or studying in Mosques and Koranic schools. A third reason is that, as Brouilly (1932: 49) states, night-time is, in fact, the domain of supernatural creatures and of the djinn, especially knowing that most folk stories or tales revolve around or are somehow related to these creatures. However, people do not always confine themselves to a specific time. The nature of some stories is such that they can be recounted at any time; therefore, people tell them, when they return from afternoon prayer or when they gather at tasks of weaving, sowing, planting, harvesting and threshing or at public spaces when in it comes to professional storytellers. (Johnson et al, 1970: 119; Bouquest, 1974:87). In winter, stories are usually narrated when family members, including parents, grandparents, children and grandchildren, are gathered around a big hearth or fire place called */lkanun/*, trying to get warm. During the dry season, people choose to tell stories in the open air. They gather around the '*ksar*' gate, with mud benches called */dukkana/*, where the elderly and the jobless spend most of their time waiting for the muezzin to call for prayer. Folk stories are also likely to be recounted on farming plots and threshing floors to help labourers put up with hard work at scorching temperatures. Storytelling is usually associated with old people – grandparents, who represent a reservoir of the cultural heritage of their speech community. In this respect, Zeggaf (1983:142) rightly states that the death of an old man amounts to the burning or destruction of a library. Storytelling is linked to the elderly for psychological reasons; after retirement or due to the inability to continue work on farming plots or elsewhere, old people take upon themselves to tell stories to their children and grandchildren; storytelling, for them, is a way to assert themselves and prove that they are still useful. Old people, moreover, believe that storytelling will enable them to transmit the old, real cultural, religious and moral values to the younger generations, values which, they think, are being challenged and jeopardized by foreign ones. Storytelling is also associated with women. In the Sahrawi community, like most rural areas, the place which is thought to be proper to women is the home. They are expected to be just housewives and, according to them, telling stories to their children is part of their role of socialization and education. Besides, women do not move widely and are not exposed to impacts from other foreign cultures; thus, women, contrary to men, who often move in search of work and who are likely to be influenced by dint of their contact with other cultures, keep their original and unchanged traditions.

5.2. Motives of Narration

Folk stories are usually used to serve many functions within the speech community which endows them with life. In the Sahrawi community, this genre of oral literature is meant to provide amusement, to educate the young and to provide a psychological outlet or a compensation face to traumas or periods of deprivation (Encyclopedia Americana VI: 274). In other words, the importance of folk tales in the Sahrawi community lies in their contribution to the "framing and preserving memory and identity", and triggering nostalgia and collectivity (AL Khammash, 2014). In addition to providing entertainment, these stories have an educative role. They are moralizing to children. Parents and grandparents use some humorous and sometimes magic stories to direct children and show them rules of good behavior. In this respect, it is argued that "often a terse statement of proper behavior is appended to a folk story in order to emphasize its moral implications" (Encyclopedia Americana VI: 274). This is clear from the statement below by Johnson et al (1970: 97), who argue that "*Because children refuse and shun direct moralizing, parents have recourse to stories and tales to inculcate moral and cultural values to their kids and show what they want them to learn. La Fontaine states that 'Fables in sooth are not what they appear; our moralists are mice, and such deer; we yawn at sermons, but we gladly turn to moral tales, and so amused, we learn'*". Children, therefore, are drawn indirectly to learn through these stories which usually move toward the expected end when good comes to glory and joy, and evil is punished and reprehended.

Folk stories are also said to represent a psychological outlet and a sort of 'wish-fulfillment' for the people of the community that produce them. According to Freud, cited in Susan (2007), wish fulfillment occurs when unconscious desires and aspirations are repressed by the ego and superego due to guilt or taboos imposed by society or in whatever way. Wish- fulfillment is the satisfaction of a desire through an involuntary thought process. It can occur in dreams or in daydreams. This satisfaction is often indirect and requires interpretation to recognize. The same holds true for folk tales. According to one of my informants, a 70-year old man, people used to tell stories to soothe and comfort themselves and their children face to the difficult economic and climatic conditions in which they lived. Put in different terms, their homes or houses were not well furnished and with no comfort or amenities at all and there was not enough food, if any at all, to feed themselves and their children; therefore, they resorted to stories to lull their children as well as themselves to sleep despite those conditions (cold, hunger, etc...). People are also somehow psychologically relieved through the actions of the characters in general, and the hero in particular. In most stories, this hero challenges and rescinds the social restrictions and "functions as a release value for all the anti-social desires repressed by the men who tell and listen to stories" (Abrahams 1968: 195). The heroes of these stories behave as the members of the society would behave were there no constraints of fear. This may be shown by the actions of the young hero in story (17) who steals the king's gold and money and is never caught despite the king's various attempts. The hero's actions must normally be socially condemned, for they are destructive and illegal; however, they seem to be admired and enjoyed by the teller and the listener alike because the hero is sort of acting on their behalf and takes their revenge vicariously or by proxy. In the Sahrawi community, it is widely held that women seem to use a particular type of stories, i.e., fairy tales. In this respect, Bourrilly (1932: 48) states that fairy tales, like animal tales which transport us to unreal worlds, are usually told by women. women, it is important to remember, tend to comply with the children's wishes since, as was mentioned earlier, children admire and enjoy marvelous and beast stories. Besides, because of the social division of roles, women are mostly housewives and their main activity is taking care of their kids and doing the housework while their husbands work outside the house. We have here a public/private division, where work indoors is for women and work outdoors is for men (Maliki & Khtira, 2019). This being the case, women are confined to a limited domain- home; therefore, they try to free themselves and go beyond this constrained environment in stories and roam freely in an imaginary world, hence the notion of 'wish-fulfillment', mentioned earlier. Since they were not allowed to leave the home in real life, they tried to do that through recounting fairy tales, of which the plots, settings and characters enable them to travel to distant worlds. The stories recounted by women, moreover, give interesting insights and clues about their psyche, in so far as they appear to usually concentrate on physical appearance, garments and jewelry of the characters in their stories, which, in turn, reflects their oppressed desires, aspirations and yearnings. It also shows that, as Belarbi (1979: 91) states, the "importance of a woman is not perceived in terms of her work or activity, but in terms of her physical beauty," and ability to give birth to children. For example, in story 18, a female storyteller, describing a girl, says:

**/zzin lli3taha llah maj tšabji/
(she has incomparable beauty)**

Contrasting this girl to her neighbor's girls, she also states:

**/kant hdahum wahəd ʒʒara ʕəndha sbəʕ bnāt ʃi ʕwəʒ w ʃi mʃəlqəm, ʃinin/
(Her neighbor has seven daughters who are all ugly and plain)**

In story 8, the storyteller says that the princess's hair was so long that she used it to cover seven girls. Here again, we see the importance of hair in a woman's physical appearance and beauty, which is considered a *sine qua non* for her getting married.

/sbəɣ ɣəzbat ɣəttat hum bɣəraha/

(Seven girls that she covered with her hair)

In addition to the physical beauty, women also tend to focus on garments, ornaments and jewelry. For example, in story 18, the female storyteller says:

/wxərrɣt mənhum lkəswa w ssbabit wddhəb/

(and she got clothes, shoes and gold from them)

Besides, in story 25, the young storyteller, describing a woman who received beautiful clothes as a reward for her good deeds, says:

/lmalabis rrfiɣa wlzawahir/

Stories told by female storytellers also reveal that women often focus on the notions of fertility and sterility of their female characters. This is clearly shown in stories (26, 27, 28). In story 27). In story 27, the storyteller says:

/wahəd rrazəl mɣəwwəɣ wahəd ləmra wəldat mɣah səbɣa/

(a man married a woman and she gave birth to seven children)

In the same story, the storyteller says that after his first wife's death, the man married another one who happened to be sterile.

/tɣəwwəɣ wahəd ləmra xra w ma wəldatɣi mɣah /

In story 28, the storyteller says:

/ wahəd rrazəl maɣəmmru ma wəld mɣaha, w kajtləb llah jəɣtiɣ ɣi wlidat /

(A man has no children, and he invokes and prays God to give him children)

The above examples imply that people in the Sahrawi society, like in most Arab societies, give more importance to child bearing. They relate the increase in the number of children to the prolongation of the family and to success in agricultural work and other craftsmanship jobs. It is, therefore, necessary for a woman to give birth to children to be useful; otherwise, she will be of no significance to her husband, her in-laws and society in general. This stresses the suffering and "tragedy of sterile women, whose role is restricted within the family and society as well" (Belarbi 1979: p 94). Through the medium of these stories, then, women seem to be denouncing a serious problem that a female is doomed to encounter if she happens to be barren. Thus, they seem to be attacking and, to a certain extent, revolting against, these unjust social norms. In male stories, women are most of the time described in terms of negative qualities. They are often referred to as deceiving and resorting to tricks to justify and hide their misdeeds (Leguil 1984: 24). In other words, the common behavior that is proper to women is the superstitious practices. Not only are they illiterate and socially limited, but they also do things that are thought of as absurd and irrational. The stories convey a negative image of female Moroccan society. The place where these superstitious and black magic practices take place is the home of *chouafa* (fortune teller) or *lafkih* (religious cleric) who were believed to possess a spiritual power whereby they can expel the evil forces by performing certain rituals, which, in turn, can be explained by peoples' "desperate search for aid from the unknown" (Maliki & Khtira, 2019:5). For instance, in story 7, the storyteller shows how a woman pretended to be ill to make her husband call the religious cleric */lafkih/*, with whom she had a love affair.

Moreover, women are depicted as obstinate and hard-headed, as in story 24, in which the storyteller says that a man's wife was so obstinate that her husband, having heard that she had drowned in the river, swam upstream and against the current rather than swimming downstream, thus showing that she would be hard-headed even with the river and even while drowning. The religious cleric, in turn, is depicted as deceiving in Sahrawi folk tales. He is referred to as someone who is vicious, lustful and who misuses his knowledge to achieve his ignoble goals. For example, in story 7, the storyteller shows how the religious pretended to want to cure the possessed woman when in fact he was interested in the woman herself. The storyteller may, to some extent, stand for society's negative attitudes vis-à-vis the type of religion as embodied by vicious religious clerics.

6. SOCIO- CULTURAL AND ANTHROPOLOGICAL ASPECTS OF FOLK STORIES

6.1. Adult- child communication

Folk stories usually have a communicative role within the community which produces them; that is, a community uses these artistic creations, together with other genres, to communicate something and inculcate values to the younger generation. Folklore makes use of speech which is an instrument of socialization and enculturation, that is, as Hudson (1980: 99) defines it, the process whereby children, and foreigners become competent members of their community. Ochs and Schieffelin (1990) state that the two processes, i.e., socialization and enculturation do not occur apart from the process of language acquisition; instead, children acquire language and culture together in what appears to be an integrated process. In the Sahrawi community, the family has always been the first school the child contacts. It has some specific characteristics which influence the child's mental and intellectual growth (Guesssous 1983: 52). The child acquires their first knowledge of their environment through every day conversations and interactions with their parents, for, according to Ouzzi (1982: 63), childhood is a decisive period and is of great importance in the individual's life and has a great impact on the shaping of their personality. Folk stories are, therefore, a kind of interaction by dint of which parents teach their children various things. For instance, they teach them lessons on good and proper behavior and prepare them to accept a common system of values and attitudes vis-à-vis what right conduct is and what its goals are, by recounting to them stories in which good leads to victory and success, whereas evil results in defeat and failure. Through stories, old people try to inform the youth of the social organization, roles and relationships prevailing within the society (Belarbi 1979:88). In other words, they try to make them understand the social roles that every member of a cooperative group, i.e., a family or a speech community, must have. For example, the story teller uses several characters each of whom is assigned a role and is expected to accomplish a given task in view of achieving the same goal. The cat drank the milk of a man called /bbamhiməd/ who cut its tail. Then, the cat had to bring him his milk back to get its tail back. Thus, all the characters of the story had to take part in this matter by giving or doing something of their own in order for the cat to get its tail back. This story, we suppose, aims at making the child aware of the fact that one cannot get what they want without anything in return and without team work and cooperation; there should be an exchange of things. It also shows that there is a kind of interdependence between the members of society and each of them has a role to play in order for society to survive. Besides, the older generation uses stories to inform young people of their ancestors and their glories. As Utley (1968:7) puts it, they are "preoccupied with returning to an appreciation of the culture of their parents and grandparents". Through these stories, they tell their children of the bravery and courage of their parents to stress the purity of their origin. The insistence on the glorious past of their ancestors results from their desire to foster and promote conformity to cultural norms and respect of agreed-upon institutions. Traditional stories are useful in so far as they suggest "new structures, new techniques and new styles that transcend the fixed patterns imposed by the European colonizers and which resulted

in the replacement of a culture based on respect, love, honor and brotherhood by another whose basic principles are individualism, hatred and violence (Boukous, 1977: 317). To define reality to young children seems to be a mammoth task; therefore, parents have recourse to stories to give their children a view of the world of which they are part. For example, through stories, children learn about the threat of evil in the world, such as the presence of demons and jinn, which are stronger creatures and may be cruel to humans (Aljirari, in Usri Shkir, 1978: 9). They also learn about the evil in man himself and his lust, wrongdoings and unreliability. This is of great importance to children because "to read of horror may even fulfill some need, to know symbolically what the threat may be, to hear it brings it closer to reality, but to see it in pictures, is to define it too clearly and to shut off the protection of only half knowing (Johnson et al, 1970 :123). It is, moreover, said that "the vital functions of speech are acquired in interaction with adults" (Hymes, 1962:125). This implies that the child is made competent in their native language owing to listening to stories, in which the storyteller uses eloquently their linguistic ability and skills, thus showing to the child the flexibility of language. The child's task to master their spoken as well as written language is made easier since "the structure and style of the tales accustom [them to the art of writing and speaking] at its best for there is economy of language ..., there is imagery, there are flashes of poetic insight and the clear echoes of spoken words and individual ways of saying things" (Johnson et al, 1970: 123). Besides mastery over their native language, listening to stories, as (Johnson et al, 1970: 123) argue, helps the child gain the habit of wonder and the power to thrust their imagination beyond the limits of their surroundings. The child's imagination is in effect sharpened by storytelling because, when listening to a story, they are supposed to conjure up and build the scenes with their own eye based on what they hear and are also "aligned, as it were, with the past, better able, therefore to understand the present and to sense the future (Johnson et al, 1970: 114). According to Goffman (1965: 65), talk is socially organized, not merely in terms of who speaks, to whom and in what language, but also as a system of "mutually ratified and ritually governed face-to-face action, a social interaction". Storytelling is no exception. In the Sahrawi community, the audience of storytelling consists mainly of children. However, this is not always the case; adults, men and women, are still hungry and impatient to listen to folk stories.

6.2. Adult– Adult Communication

We have seen that adults have recourse to folktales to communicate many things to young children. The question that comes to the fore here is what function stories have in adult- adult communication. Some of the storytellers we talked to claimed that adults use folk stories as a means of recreation and entertainment. They also use them as a frame of reference in their description of a certain situation. For instance, when the topic of an interaction is the weakness or cowardice of a person, the interlocutors may refer to a story to make their arguments seem persuasive and convincing. As an illustration, one of the interactants may say:

/hadak raʒəl dajər bħal dik nnaʒʒa mʒa ddib.../

(that person is like the ewe (female sheep) with the wolf)

This shows that the ewe (female sheep) is no longer just an animal character in folk stories, but a symbol of cowardice and weakness as well. It is usually the victim and prey of the wolf in stories as well as in reality and is held in some contempt among old storytellers (Johnson et al, 1970: 125). In addition to this, when someone is talking about a strong, haughty and naive man who is easily duped and defeated by a humble and modest man, they have recourse to a story to support what they say, as is clear from the example below:

/hadak dħalu bħal dakʃfi lli dħa lssbəʒ mʒa lganfud/

(what happened to him is just like what happened to the lion with the hedgehog).

Folk stories are also used by adults as a means to boast and show their witticism by telling stories including messages of which the ingenuity and verbal skill have the power to evoke humor, laughter and satire. They also try to show their cleverness in perception and choice of words. In this connection, they engage in some competition-like conversations by telling stories containing riddles and encodings that should be deciphered. Here, the storyteller tries to display both their wit and ability to play on words and at the same time tries to challenge the listeners to see how sharp their wit and intelligence are. Hudson (1980) claims that speech is skilled work in which people's abilities and skills may vary. Storytellers are well at narrating, a skill that not everybody can have and thanks to which they endow the style of their storytelling with astonishing persuasion techniques and aesthetic qualities, resorting to figures of speech, metaphors, hyperboles, among other things (Leech, 1962). Old people in the Sahrawi society, moreover, use folk stories as a criticism of their society. They resort to humorous stories displaying characters' meanness, weird and strange behavior; in fact, this is somehow a sort of self-criticism because, as Boukous (1977: 313) has rightly stated, "l'œil critique qui accompagne le rire sur soi, en effet, ressemble fort à une auto-critique, car une communauté qui se reconnaît dans une œuvre culturelle en s'observant, sans condescendance ni charge, se débarrasse de la gangue qui l'étouffe et du sommeil léthargique dont on l'accable, elle devient vivante de cette vie qui permet de se remettre en cause de mesurer objectivement l'étendue du handicap historique contracté et même de le relativiser avec sérénité". A close look at the stories will clearly confirm that while the storyteller entertains the listeners, they depict societies' defects, flaws and imperfections and ultimately incites the audience to change their manners and act in a proper way; otherwise, they will be subject to derision and ridicule. This ties in with the idea that most of what is communicated via language is unsaid (Traugot & Pratt, 1980); people understand each other not only because they speak the same language, but also because they share the same schemata (Reynolds et al, 1981; An, 2013, Choudhury, 2014, Seymour, 2017, Maliki et al, 2019), i.e., the same cultural background and cultural value systems. Unfamiliarity with the schemata of the storyteller may affect the audience's understanding and appreciation of the stories being narrated and may result in distortions and misunderstanding. All the efforts made by the storytellers are, to a large extent, motivated by the objectives they intend to achieve and the message(s) they plan to convey. They may want to influence the thoughts of their audience and not give them the opportunity to question the realistic quality of their stories, which ties in with the contention that language is not only a means of sharing information. Instead, it is a means of power to influence the hearers and make them adopt the same position. In this connection, Bourdieu (1977 :20) argues that linguistic competence is also « la capacité de se faire écouter. La langue n'est pas seulement un instrument de communication ou même de connaissance, mais aussi un instrument de pouvoir. On ne cherche pas seulement à être compris mais aussi à être cru, obéi ». Old people also use folk stories as a tool to explain and understand some of the natural phenomena surrounding them. As an illustration, one of the storytellers says that the products of the date palms increased because of the miraculous cures of a saint.

/3a lwali wsalla bihum wadakkər lhum nnxəl wdak l3am 3ta llah lxir/

(The saint came and prayed for them and pollinated their date palm trees; and there was a significant increase in production that year).

This fact is in keeping with storytellers' tendency to, as we have already stated earlier, glorify the ancestry and subsequently to validate rituals and beliefs. Therefore, they unconsciously contribute to the religious reinforcement, legitimization and perpetuation of the established social constructs, i.e., social and family bonds, by presenting these legends as facts, of which the truth cannot be called into question.

Through telling folk stories, storytellers reveal the burdens of life that men have and their distress because they are aware of the tragic end that awaits them. This is clearly shown in story (20) in which the storyteller tries to account for why men live longer than animals. He links this to the fact that God gave the camel, the dog and the cat forty years to live, but they invoked and prayed Him to reduce it to only twenty and give the rest to man. Therefore, men have to live a longer and more painful life. He also compares each phase or period of man's life to an animal; when man is young, he is like the camel, known for its strength, endurance and hard work; however, when he exceeds forty years of age, he becomes like an old camel that is unable to work any longer.

/hit kajbda j3if 3frin djal 33māl kajhās blə3ja w kat wə33u səhtu bhal fi 3māl mahluk/
(when he lives the twenty years of the camel, he gets tired and his body aches as that of an old exhausted camel).

When a man reaches eighty years of age, he becomes like an unwanted dog which is always victim of stones thrown at him and of people's kicks:

/faf katəbda 3əfrin djal lkəlb kajthās blmut qərrbat wkaj3if ddənja kajə3ri w jənbəh bhal lkəlb lahəqqaf kajfuf nnas kajdiru ffər/
(when the twenty years of the dog begins, he feels that death approaches and he hates his life. He starts running and barking like a dog, for he feels that people are doing nothing but wrong things)

Finally, when he reaches one hundred years of age, he becomes just like a cat which is fully aware of the evil and wrong doings of other people and can do nothing but keep mewling.

/hit katəwsəl 3əfrin dajal lməff kajəg3ad frrəkna ma kajthərrəkfi kajfuf dakffī lli kajə3ra gbaltu w ma jgəd jdir walu dik ssa3 yir kajəndər/
(when he reaches the twenty years of the cat, he sits in a corner without moving. He sees what happens before him and cannot do anything; he keeps moaning and groaning)

Besides, when telling folk stories, adults distort reality through using what Leech (1969:167) calls "tropes" and 'honest deceptions', particularly hyperboles. This takes place when the story teller uses overstated things that are not incredible not only in the given situation but in any situation simply because they are outside the bounds of possibility. The following statements taken from stories (30, 31) can serve to illustrate this. In story (30), the storyteller says:

/ssuq fssma/ (the market is in the sky).
/dllaha gəd 3bal/ (a water melon as huge as a mountain).
/llit w ana nfuf 3əmmti nnamusa katəsləx f 3mālha.../, (I peered and saw the mosquito trying to skin off its camel/
/3a rakəb 3la ddik wa 3arr 33māl/
(he came on the cock's back dragging the camel)
/3at rrih wəwwə3at dak ssabi wəst lwərgijja.... wlqawəh fqəlb lwərgijja/
(the wind blew and caused the baby to be lost into a kind of arugula or watercress)

All the examples above can fall within 'logical absurdities' (Leech, 1969) because in view of our knowledge of the world, they are not and can never be believable. According to leech (1969:166), "we must bear in mind that if we say hyperbole distorts reality, we mean it bellies the state of affairs we actually understand to exist either in the real world or in the imaginary, fictional world" created by the storyteller. This implies that the storyteller uses overstatements to communicate people's insufficiencies and their yearning to achieve these things in stories, for they cannot achieve them in real life.

In this case, distortions of reality in folktales represent a kind of wish-fulfilment, as we have already mentioned. This very fact can also be explained in terms of the fact that storytellers, and through them the whole community, resort to irony which takes the form of implying the opposite of what one feels is reality (Leech 1969: 166). No wonder, then, that folk stories have a communicative function for adults as well as for children.

6.3. Cultural Values in Stories

Artistic creations, be they oral or written, are revealing of at least some part of the cultural value system of the people who produce them (Robins, 1978. Language-based artistic creations are usually culturally-loaded; they are symbolic projections of the teller's culturally and socially determined world view (Tuttle et al, 2019; Scherzer, 1987; Guerin et al, 1979; Smith, 1987). The same is true of the Sahrawi folk stories. They contain important information that lay bare people's traditions, rituals and beliefs; while narrating their stories, the storyteller makes constant references and allusions to daily activities, ceremonies, famous characters or figures and, above all, the shared bodies of commonsense. Sahrawi folktales give us insights into people's activities in that area. They inform us that the area is a traditional agricultural society, in which people rely almost exclusively on food-producing agriculture for their living and subsistence. In the early morning, people, males and females, are expected to go and gather grass to feed their cattle, as is shown in story (1), in which the storyteller uses the following words that refer to agricultural tools and products:

/jhəffu/ (to mow)

/mhəffa/ (a kind of small scythe)

/fəssa/ (Lucerne, alfalfa)

The above terms show that people in the Sahrawi society rely primarily on small-scale cattle raising. The area is known for not having fertile enough lands to enable them to grow other crops and in sufficient quantities, so they can move to market farming. This is clear from the farming words used in stories, such as */lbhira/* (a small vegetable garden) and */lgəmmun/* (a small farming plot) in (story 31). These words indicate small land plots used to grow vegetables and other food crops, as opposed to the word */lfirma/* (a big farm) found in other regions of Morocco where the lands are more fertile and the rainfall more important. In story (29), moreover, the storyteller informs us that people in this region relied on barter to meet their needs; they used to take some locally produced crops to exchange them for others for which nor the lands nor the climate of that area are well suited and which they needed more. For instance, they used to take dates and maize to get wheat and barley in return, as might be illustrated by the following statements:

/wfdik lwqita kanu mnas kajtbadlu lyəllat/ (at that time people used to exchange crops)

/ kajəddiw drijjat wtmirat jbəddluhum bəffzir wl lgəmh/

(He used to take some maize and dates to exchange them for barley and wheat)

Stories also inform us of some of the jobs and occupations that were, and are still practiced by people in the Sahrawi society. While reading these tales, we can come across words like */lhəddad/* (the blacksmith) who serves to make some iron tools that people need to work in their fields. Moreover, we find */lbrad3i/* (saddle maker) who makes saddles for donkeys, the main means of transportation to and from the fields. Finally, we find */lhəssad/* (the harvester), */lxərrat/* (olive harvester), */lhəttab/* (wood cutter) who gathers wood and sells it to people who make use of it for getting warm and, most of the time, for cooking since they lacked modern and more sophisticated household appliances as well as */six lyəbæ/*, a person whom the community entrusts with keeping watch on people's ripening crops, such as dates, olives and other crops pending harvest and collection in return for a fee either in cash or in kind.

During narration, storytellers make constant allusions to some ceremonies and performances that are peculiar to the Sahrawi society in particular, and to some extent, to Moroccan society as a whole. Marriage ceremonies are cases in point. These narrated stories reveal the traditional way of celebrating marriages, with the celebrations lasting for a long time. In story (18), for example, it is said that the marriage ceremonies lasted for three weeks:

/sbə3 jjam sbə3 jjam fsbə3 jjam/

(three weeks, and three weeks and three weeks)

During the three-week period, several rituals are performed to accomplish the marriage. First the marriage certificate is drawn by the notaries of Islamic law */lə3dul/*, who are authorized by the judge of family matters to perform and document civil marriages in the presence of witnesses, as the following might suggest:

/ʒəqdu wdaru fʃhud/ (they wrote the marriage certificate and invited witnesses)

The introduction of the documentation of marriage through the establishment of a written marriage certificate as a practice is something new and it aims to preserve the right of the woman in case of the husband's death. Common-law- marriages and those performed in the presence of twelve witnesses were the common practice, for the aim was to make the marriage religiously acceptable and legitimate. The bridegroom, then, has to be taken to her husband's home in a kind of sedan chair like camel litter called */lqəbba/* carried on the back of a camel or a horse, which have nowadays been replaced by cars. Before the arrival of the bridegroom, the bride, on the other hand, has to be taken to the river on horseback, where the horse's legs are dipped and immersed into water. After that, the bride is brought back home with special religious chants and songs. This process is called */nnsir* (to make someone triumph). During this ritual, according to many storytellers, the bride is rendered victorious and is given support and strength to start his new life and assume his responsibility of husband and father. This can be exemplified in story (19), where the storyteller says:

/darulu lmuqsira w hənnawəh w xərrʒuh jətnsər/

(they had a party, played music, put henna to him and took him out to make him victorious).

Stories also inform us of the celebration of the naming ceremony called */ssbu3/*, the seventh day after birth when the new born is given a name. Usually, the grandfather or both parents choose an appropriate, Islamic name with a positive meaning or connotation. The naming ceremony or */ssbu3/* takes place on the seventh day and involves the slaughtering of a sheep or many sheep as sacrifice to God; the meat of the sacrifice is given to relatives and neighbors in the form of meals or given to poor and needy people of the "Ksar". The relatives and neighbors are, in turn, expected to bring some goods, as presents and gifts, with them, usually sugar. Then, the new baby's grandfather or the religious cleric whispers */æðæn/* (Islamic call to prayers) into the new born baby's right ear and then cites the selected name three times. This ritual is common in all religions and is more or less the Islamic equivalent to the Christian baptism ceremony. It is often claimed that storytelling is the outcome of a feeling of nostalgia. John-Hughes (2006), for example, states that modern societies are under constant threat; people live in a state of anxiety and there is a need to escape from the constantly changing technology surrounding them. Therefore, there is this feeling of nostalgia for the traditional, modest and thrifty ways of life of grandparents as well as their 'make do and mend' mentality. In this connection, Sahrawi storytellers make allusions to the past to show some aspects of the old Sahrawi society, be it positive or negative. In stories (9) and (29), for example, the storytellers talk about the bravery of their ancestors and how they bravely fought */lqəttə3/* (bandits and road robbers) who used to attack caravans bringing goods from other regions or even attack the 'Ksars' themselves, especially during the times of */ssiba/*, a pre-colonial period characterized by the absence of

administration and by the law of the jungle" (Lhourti 1983). This can be shown in the example below:

/wfdik/ lwəqt kænu lqatta3 kajt3ərrdu lgaflat wkajddiw lhum ssəl3a/

(At that time, road robbers and bandits used to attack caravans and stole their goods)

A striking thing is that Sahrawi storytellers make use of certain characters which, except for the supernatural creatures, are familiar to the Sahrawi society. However, we will confine ourselves to some of them which appeared in the majority of the collected stories. These are the snake, the Jew and the old woman. According to Naillon (n.d.), snakes and serpents are among the most common symbols in modern literature and have different symbolic representations. Because they resemble phallic symbols, snakes and serpents stand for fertility, rain, water and holes in the ground. The snake is also a common symbol in Sahrawi folktales and is assigned different roles in each of them. Sometimes, it is the punisher of the wrongdoers, while oftentimes it is the wrongdoer and source of harm itself. The presence of the snake in Sahrawi folktales may possibly be linked to the properties of the climate and terrain of the region; it is a hot place located in a semi-desert region, in which snakes can easily be seen and in large numbers. An alternative explanation is that snakes and serpents are an almost daily threat to Sahrawi people and their children; therefore, they are usually present in their imagination and subconscious minds. The Jew (Jewish person) is another character which often appears in Sahrawi traditional or folk stories. The Jew is usually associated with gold jewelry making, money and other highly lucrative jobs or activities, such as tailor, blacksmith, and money lenders, i.e., usury or lending money which has to be paid back with interest. In story (8), the storytellers say:

/mfali ttəhlil lihudi lli dæg dak jdæg wahəd xir mənnu/

(I have lost my golden ornament... the Jew who made it will make another better one).

The Jew is also associated with knowledge of magic. According to one of my informants, the association of Jews with such things can be ascribed to their dominance and control of highly lucrative and profitable fields, i.e., they were wholesale traders, gold smiths, tailors, saddlers. However, most of the time, the Jew is associated with cheating and betrayal as in stories (14), (17), (21). This can perhaps be, as Boukous (1977: 327) puts it, ascribed to racism against Jews and contempt for non-Muslims, xenophobia towards any person that is not well integrated in the tribal community. The type of education that most people received, the mental environment and intellectual environment that prevailed can also account for this phenomenon. As Housni et al (2018) and Zine-Dine& Maliki (2020) argue, throughout the history of the Arab world, the rulers struggled to spread ignorance among successive generations. They stuffed school curricula with teaching methods and materials that ran counter to reason, knowledge and development. The prevailing discourse sought to push people to trivialize others and their achievements as a way to compensate for and justify failure and underdevelopment. The old woman is also a prominent character omnipresent in Sahrawi folk stories; she is referred to as */mma 3gəjza /* and is associated with knowledge, which she sometimes uses to trap people, as is shown in story (17), when she goes asking people to give her some fat of the she – camel pretending to want to cure the king, when in fact she wants to discover where the king's stolen she-camel is.

/bdāt kaddur dar bdar galtlhum fkun lli 3əndu fwi ffaħma nta3 nnaga rah sidna mrid/

(she knocked on door after door and asked people if they had some fat of the she-camel because the king was ill).

7. SAHRAWI BELIEFS IN FOLD STORIES

As we have already stated earlier, culture includes three categories, namely ideas (beliefs, values and institutions), behaviors (verbal and non-verbal language, customs, habits, rituals) and products (artefacts, folklore and other artistic creations). Just as folk stories in the Sahrawi society reflect people's traditions, they also reflect people's beliefs and mentality, for they seem to be the expression of the conscious and unconscious (Jean 1981:83). Therefore, a close look at these folk stories reveals the Sahrawi people's superstitious and religious mentality. They believe in the irrational and superstitions and resort to what has come to be called "surrender to fatalism", which, in underdeveloped societies, means the law of arbitrariness in explaining cruel natural phenomena (Hijazi, 2013:162-163). Such feelings feed off deprivation and ignorance and represent a sort of solace, in so far as such ordeals are taken as expiation and atonement for committed sins. The frequency of these phenomena and interpretations may lead to the conversion of fatalism into a kind of duty that is associated with the necessity of accepting disasters and misfortunes as a test of faith and, therefore, should not be totally disobeyed or rejected. All that is allowed in such circumstances is prayer (Maliki et al, 2019). The constant resort to prayers serves to organize phenomena, enable individuals to have a sense of control over their destiny and provide a sort of rationalization or justification to life experiences face to individuals' helplessness to influence the course of events (Hijazi, 2013:164; Maliki & Housni, 2020). For example, in story (12), the storyteller says that the cat was asked by the spring of water to bring dancers to it in order to get some water:

/galilha l3in siri 3ibili ffitahat/, (the spring asked the cat to bring women dancers to it)

This can probably be linked to people's belief that the spring of water will flourish if they bring the dancers to it, which is perhaps related to the many rituals old societies used to perform to make something take place, such as rituals performed to bring rain. It is said that in old Egypt people used to offer sacrifices to the Nile in order to make it overflow in the right time. Another example of this is that found in story (7) in which the storyteller says that when the snake coiled itself round the body of the prince, the king ordered that */3isawa/*, a group of Sufi singers who are believed to possess a spiritual power whereby they can expel the evil forces, perform their rituals to make the snake release the prince. This of course shows people's desperate and illogical search for help from the unknown. In story (29), for instance, the storyteller says that whenever a woman happens to be barren, she goes to a shrine or a holy man's grave and passes her belt over it.

/kant ləmra jla makatwəldchi katəmfī lrruda wkatədəwwəz hzamha 3la qəbru/

(if woman happens to be sterile, she goes to the cemetery and passes her belt over his grave)

Also, in story (18), the storyteller says that the she-camel refused to move in protest against the father who forgot to bring the seven pomegranates he had promised to his unwanted daughter.

/bajərkəb fnnaga whija mabyatfi təmfilu/, (The she- camel refused to move)

In this respect, Hand (1968: 243) states that superstition always thrives and prospers in people, of whom the mental horizon is low and reasoning power limited. This also shows that the uncertainties and hazards of life and the different unexplained facts that people encounter push them to look for modes of thought that are inevitably based on the irrational which underlies superstition. Besides, Sahrawi folk stories show Sahrawi people's constant use of supernatural and imaginary creatures as characters in their stories. An illustration of this is the extensive use of the */lyul/* (ogre) or */lyula/* (ogress), the many-headed dragon */ʔasaʔ mula sbə3 rus/* (seven headed dragon) as well as the use of Jinni and demons, which are believed to take different shapes, as is shown in story (1):

/wahəd ʒʒən tməθəl fsift həns/, (a jinni which transforms itself into a snake)

These examples, as Hand (1968:243) has pointed out, clearly show people's concern and worries about the large number of invisible forces that lie behind the visible world, and which arouse in them feelings of wonder, fear and overwhelming anxiety. Apart from their superstitions beliefs, Sahrawi people have an unfailing religious mentality. When recounting stories, storytellers never fail to mention the word */ʔallah/* (God) and the name of prophet Mohammed (PPBU). God is, for them, the founder of the universe and all creatures in it, whom every Moslem should worship. The prophet is the God's messenger who revealed His message to humanity. This shows that the Islamic religion is deeply rooted in them. In this connection, Parker (1976:97) puts forward that any attempt to define Arab culture "must recognize Islam as its foundation. Even those who no longer observe all its tenets remain loyal to its basic concepts and give Islam its proper respect". Most Moroccans are no exception to this. They profess the religion of Islam; their verbal, nonverbal behavior and, subsequently their thought patterns derive from the Islamic doctrine and the Holy Koran, and a systematic explanation of the majority of their cultural values can be provided by Islam. As an illustration, let us to consider the opening expressions with which every story begins:

/hada wahəd rraʒəl ma raʒəl yir lli yərʒa ʔallah/

(there was a man, none is a man but those who believe in God and expect His grace and compassion

/ʒətti ʒlə nnbi/ (pray for the prophet)

Storytellers also use certain expressions through which they intend to confirm the never-failing power of God; for a thing to happen, there should be God's consent or will, as is shown by the following:

/nəynih yir jla maynah ʔallah /, (I will make him rich except if God does not want it to happen)
/nʔallah/ (if God wills).

The frequent use of the word */nʔallah/* (if God wills) may be explained by people's desire to abide by God's directions in in Surah Al-Kahf (the verse of the cave) in which God says: "And never say of anything, "Indeed, I will do that tomorrow," except [when adding], "If Allah wills." And remember your Lord when you forget [it] and say, "Perhaps my Lord will guide me to what is nearer than this to right conduct." *The Holy Koran, Surah Al-Kahf*).

Some of the folk tales in the Sahrawi community, like other artistic creations, such as drama, novel and poetry, appear to have religious origin" (Dermenghen, 1983: 139). That is, they share plots with and have similar themes as some verses of the holy Koran. For example, story (2) is about a girl who became pregnant only because she picked up a leaf from a tree and ate it. She was accused by her parents and other members of the family of having had sexual intercourses outside wedlock and, therefore, the baby in her womb is illegitimate. When she gave birth to a child, the latter confessed to people that his mother was innocent. This story is similar to the story of Mary, the virgin, who, according to the Koran, gave birth to Jesus Christ without having had any sexual intercourse with any man. In the Koran, God says, "we sent her Our spirit in the semblance of a full grown man... I am the messenger of your Lord", he replied, "and have come to give you a holy son". "How shall I bear a child, "when I am a virgin untouched by man?" " (Dawood 1956 :33).

8. CONCLUSION

The present work tried to investigate and analyze folk stories in the region of Errachidia from a socio-cultural and anthropological perspective. It has made it clear that these stories are told

by old men and women to their children and that they are meant to serve different functions. First of all, they are used as a means of entertainment and a pass time given the absence of sophisticated means of entertainment at the time when these stories were brought to life. Second, they are destined to educate the young and show them good behavior and its benefits. This is done through the narration of stories which end in rewards for good deeds and punishment for evil deeds. Third, they were meant to provide a psychological release and serve as a kind of 'wish-fulfilment' for people who produced them. Through telling stories, they, for example, try to achieve their desired goals and aspirations which they cannot achieve in reality. Besides, the variations that occur in stories according to the age and gender of the hearer and the teller have also been examined. It appears that stories told to children are most of the time fictitious and straightforward stories in which the story teller focuses on some stylistic features to make them vivid. Adult stories, on the other hand, are somehow complex and require efforts to be understood. The different types of stories told by men and women have also been discussed. For instance, female narrators adapt other varieties which are seen in terms of social prestige and that they, young ones in particular, shift to classical Arabic and French to display their education and social status. Male narrators, however, tend to stick to their variety, use taboo words, euphemistic expressions and shift to classical Arabic whenever the subject matter of their stories is religious. This very fact ties in with the diversity that characterizes Moroccan linguistic landscape (Maliki & Housni, 2019). Concerning the social and communicative role of folk stories, we have shown how old people intend to give children a view of the world of which they are part, to accustom them to the common problems and make them fully competent members of their society. We have also pointed out how they intend to glorify their ancestry in a bid to reestablish and revive the old values which are being challenged. Apart from this, we have also tried to shed light on how different traditions and beliefs are reflected in folk stories of the Sahrawi community. There are, for instance allusions to some daily activities and ceremonies. Concerning people's beliefs, we have tried to lay emphasis on their superstitious mentality through the interpretation of many natural phenomena in terms of their legendary knowledge as well as on their religious mentality shown through their constant reference to God, the prophet and the Koran. The present work is far from being exhaustive. We, therefore, recommend that further investigations be carried out to shed more light on other more interesting aspects of these folk stories.

LITERATURE:

1. Abu-Zahra, N. (1988): "The Rain Ritual as rites of Spiritual passage". *International Journal of the Middle East Studies*, 20, pp. 507-529.
2. Albee, E. (1966): *The American Dream*. New American drama, Penguin books.
3. Aldersen, C, and Urquhart, A. (1984): *Reading in a Foreign Language*. Longman Group Ltd, London.
4. Allen, E. and Guy, R. (1974): *Conversation Analysis: The Sociology of talk*. Mouton. The Hague. Paris.
5. Allen, H. (1985): Review Article of Cross-cultural encounters: Communication and Miscommunication (ed) by J. Pride: *Language Learning*, 36, N°3, PP. 387-392.
6. Altena, M. (1976): *Notes on Stephen Crane's: The Red Badge of Courage*. Methuen notes. Methuen paperbacks Ltd.
7. Althowadi, M. (1986): "almazzu lluyawijju kasulu: kun luyawijjun lilinsani almayribijji almaylubi. *The Arab Journal of the Humanities*, 22, PP. 36-66.
8. Ameka, F. (1987): "A comparative Analysis of Linguistic Routines in two Languages: English and Ewe" *Journal of pragmatics*, II, PP. 299-326.

9. Andrade, Roy. (2009). "The Development of Cognitive Anthropology." 1995 92. 10 Mar 2009 <http://books.google.com/books?hl=en&lr=&id=2QCWe2r-pvwC&oi=fnd&pg=PR12&dq=taxonomic+analysis+anthropology&ots=Vwe01uBe3l&sig=2EfRTfVyeZZyfOoIRHQwxase2K0#PPP1,M1>
10. Austin, J. (1962): *How to Do Things with Words*, Oxford, Clevedon Press.
11. Bauman, R. (1977). "Verbal Art as Performance." *American Anthropologist* 77:290–311. doi:10.1525/aa.1975.77.2.02a00030.
12. Beardsmore, H. (1982): *Bilingualism: Basic Principles*, Multilingual Matters, Clevedon, Avon.
13. Bellow, S. (1956): *Seize The Day*. Wilkins Press, London.
14. Bentahila, A. (1983): "Language Attitudes Among Moroccan Arabic-French Bilinguals in Morocco. *Multilingual Matters Ltd*, Clevedon, Avon".
15. Bentahila, A. and Davie, E. (1989): "Culture and Language Use: A problem For Foreign Language Teaching. *IRAL*, XXXVII 2, PP. 99-III.
16. Blum-Kulka, S. (1986): "Indirectness and Politeness in Requests: Same or Different. *Journal of Pragmatics*, II, PP.131-146.
17. Bourdieu, P. (1977): 'L'Economie des Echanges linguistiques', in *Langue Française*, N34, Larousse, Paris.
18. Bowles, P. (1969): *MHASHISH*. City lights Books, San Francisco.
19. Brown, P. and Levinson, S. (1978): "Universals in Language usage: Politeness Phenomena" in E. Goody (ed.): *Questions and Politeness Strategies in Social Interaction*. Cambridge University Press, Cambridge.
20. Bucholtz, M., & Hall, K. (2005). Identity and interaction: A sociocultural linguistic approach. *Discourse Studies*, 7(4–5), 585–614.
21. Canale, M. (1983): "From Communicative Competence to Language Pedagogy" in J. Richards and R. Schmidt (eds).
22. Carell, P and Devine, J. (1988): *Interactive Approaches To Second Language Reading*. Cambridge University Press, Cambridge.
23. Chaika, E. (1982): *Language: The Social Mirror*. Newbury, House Publishers.
24. Chaika, E. (1987): Review Article of Coherence in Written and Spoken Language. (ed.) by D. Tannen (1984), *Journal of Pragmatics*, II, PP .249-270.
25. Chomsky, N. (1965): *Aspects of the Theory of Syntax*. MIT Press, Massachusetts.
26. Chuang, S. (1985): "L'importance de la Compétence Psycho-socio-culturelle dans l'enseignement du français à des apprenants Chinois « Dialogues et Cultures: pratiques Interculturelles et Enseignement du Français. 27, PP 110-115.
27. Cole, M, Gay, J., Glick, J. and Sharp, D. (1971): *The Cultural Context of Learning and Thinking: An Exploration in Experimental Psychology* Methuen, Co. Ltd, London.
28. Condon, J. and Saito, M. (1974) (eds.): *Intercultural Encounters with Japan: Communication in contact and Conflict*. The Simile Press Inco. Tokyo.
29. Condon, J: (1980): "The Values Approach to Cultural Patterns of Communication" in J. Condon and M. Saïte (eds.).
30. Condon, J. (1980): "So near the United States" In M. Valdes (ed.).
31. Cook, J. (1985): "Language Functions, Social Factors, and Second Language Learning" *IRAL*, XXIII /3, PP. 177 - 198.
32. Cooley, R. and Reach, D. (1984): "A Conceptual Framework" in R. Bostrom (ed.): *Competence in Communication: A Multidisciplinary Approach*. Sage Publications, Cambridge.
33. Crane, S. (1952): *The Red Badge of Courage*. Alfred, A. Knopf, Inco, New York.
34. Croft, K. (1980): *Readings on English as a Second Language*. Winthrop Publishers, Cambridge.

35. Davies, E. (1987): A Contrastive Approach to the Analysis of politeness Formulas "Applied Linguistics", 8, N°II, PP.
36. Dawood, N.J. (1956). The Koran (Translation). Ltd, the Chaucer Press, Britain.
37. Devine, J. (1988): "A Case Study of Two Readers: Models of Reading and Reading Performance" in P. Carell and J. Devine (eds.).
38. Dodderidge, S. and Simonot, M. (1984): "Language and Culture in Interethnic Communication: Some Guidelines for Analysis " in A. Luzion and Auer (eds.): Interactive Sociolinguistics. Gunter Narr Verlag Tübingen.
39. Downes, W. (1984): Language and Society. Fontana Paper backs, London.
40. Duda, R. and Parpette, C. (1985). "La Perception Culturelle Chez Les Stagiaires Etrangers en France". In Dialogues et Cultures, PP. 20-30.
41. Durant, A. (1990): The Languages of Communication. Lecture given' at the Faculty of letters I, University Hassan II, Casablanca.
42. Duranti, A. (2003). Language as Culture in U.S. Anthropology: Three Paradigms. *Current Anthropology* 44(3) :323–348.
43. Duranti, A. (2015). Husserl, inter-subjectivity and anthropology University of California, Los Angeles, USA, 2015. <http://journals.sagepub.com/doi/pdf/10.1177/1463499610370517>
44. Eaton, R. (1988): "Children and Sarcasm: A Psycholinguistic Study" *Journal of Literary Semantics*, XVII1/2, PP. 122-148.
45. Alessandro Duranti, Husserl, inter-subjectivity and anthropology University of California, Los Angeles, USA, 2015. <http://journals.sagepub.com/doi/pdf/10.1177/1463499610370517>
46. Edwards, J. (1985): Language, society and Identity. Basil Blackwell Ltd, Oxford.
47. Eisenstein, M. and Bodman, J. (1986): "I very appreciate: Expression of Gratitude by Native and Non-native Speakers of American English" *Applied Linguistics*, 7, N°2, PP. 167-185.
48. Enninger, W. (1987): "What Do Interactants DO with Non-talk Across Cultures" In K. Knapp (ed.).
49. Feldman, S. (1986): "Culture, Charismo and The C.E.O.: An Essay on the meaning of High Office" *Ruman Relatins*, 39, N°3, PP. 211-228.
50. Fernea, E. (1975): A Street in Marrakech. Anchor Press, New York.
51. Fezza, J.& Maliki, M. S. (2019). The Mountain Paradigm: The Role of the Atlas Mountains in Shaping the Life of Moroccan Mountain Inhabitants. - *Economic and Social Development: Book of proceedings*, pp. 488-496.
52. Fillmore, C. (1984): "Remarks On Contrastive Pragmatics " in J. Fisiak (ed.).
53. Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2007). Universal dimensions of social cognition: Warmth and competence. *Trends in Cognitive Sciences*, 11(2), 77-83. doi: 10.1016/j.tics.2006.11.005
54. Floyd, P. and Carell, p. (1987): Effects on ESL Reading of Teaching Cultural Content Schemata." *Language learning*, 37, N° 1. PP. 89-107.
55. Gardner, R. (1979): "Social Psychological Aspects of Second Language Acquisition" in H. Giles and R. St Clair (eds.): *Language and Social Psychology*. Basil Blackwell, Oxford.
56. Geertz, C. (1968). *Islam Observed. Religious Development in Morocco and Indonesia*. The Chicago University Press, Chicago
57. University Press, Chicago
58. Giacomi, A. and De Héréda, C. (1985): "Réussites et Echecs dans La Communication Linguistique Entre Locuteurs Francophones et Locuteurs Immigrés" *language*, 84, PP. 9-24.
59. Gladstone, J. (1972): "language and Culture "in B. Allen and N. Campbell (eds.): *Teaching English as a Second Language*. Second Edition, McGraw-Hill Inc. New York.

60. Goffman, E. (1967): *Interactional Ritual: Essays on face- to- face Behaviour*. Double day, New York.
61. Goldman, R.E.& Borkan, J. (2013). *Anthropological Approaches: Uncovering Unexpected Insights about the Implementation and Outcomes of Patient-Centered Medical Home Models*. Rockville, MD: Agency for Healthcare Research and Quality. February 2013. AHRQ Publication No. 13-0022-EF.
62. Gregersen (ed.): *Papers from the Fourth Scandinavian conference of Linguistics*. Odense University Press. Odense.
63. Grice, P. (1975): "Logic in Conversation» in P. Cole and J. Morgan (eds.):
64. *Syntax and Semantics, 3, Speech acts*. Academic Press, New York.
65. Grimshaw, A. (1982): « Comprehensive Discourse Analysis: An Instance of Professional Peer Interaction » *Lang. Soc.*, II, 15-47;
66. Grimshaw, A. (1990): *Conflict Talk: "Sociolinguistic Investigation of Argument in Conversations*. Cambridge University Press, Cambridge.
67. Gripper, C. and Widdowson, H. (1975): "Sociolinguistics and Language Teaching" In J. Allen and S. Corder (eds.): *The Edinburgh Course in Applied linguistics*. Vol. 2, Oxford University Press. London.
68. Guerin, W., Labor, E. and Morgan. L. (1979): *A Handbook of Criticall approaches to Literature*. Second Edition. Harper and Row Publishers Inc., London.
69. Gumperz, J. (1982): *Discourse Strategies*. Cambridge University Press Cambridge.
70. Hackman, D. (1978): "Irony in Speech Acts Involving Foreigners" in K.
71. Halliday, M. (1979): *Language as a social semiotic: The Social interpretation of language and Meaning*. Edward Arnold Ltd, London.
72. Harder, P. (1978): "Language in Action: Some Arguments against the Concept 'Illocutionary' «In Gregersen (ed.).
73. Harms, L. (1973): *Intercultural Communication*. Harper and Row, Publisher.
74. Hassan, R. (1984): "Ways of Saying, Ways of Meaning" in P. Faucet et al (eds.): *The Semiotics of Culture and language*. Vol. I, Francis Publishers. London.
75. Herrmann, T. (1982): "Language and Situation: The Pars Pro To principle" in C. Sharer and K. Sharer (eds.): *Advances in the Social Psychology of Language*. Cambridge University Press, Cambridge.
76. 10.1016/j.tics.2006.11.005
77. Hijazi, M. (2013). *Al Takhallouf Al Ijtimai: madkhal ila saykoulogiat Al Insan Almaqhour* (Sociological underdevelopment, Introduction to the psychology of the dominated. The Arab Cultural centre, 12th edition, Casablanca, Morocco.
78. Humphrey-Jones, C. (1987): "The Structure of Misunderstanding" in R. Reilly (ed.).
79. Hymes, D. (1981). *Breakthrough into Performance*. In *In Vain I Tried to Tell You: Essays in Native American Ethnopoetics*. D. Hymes, ed. Pp. 79–141. Philadelphia: University of Pennsylvania Press.
80. Hwang, J. (1990): "Deference versus Politeness in Korean Speech" *International Journal of The Sociology Of Language*. 82, PP.41-55.
81. Iser, W. (1989): «Interaction between Text and Reader» In J. Corner and. J. Hawthorn(ed): *Communication Studies: An Introductory Reader*, Third Edition, Edward Arnold.
82. James, C. (1980): *Contrastive Analysis*. Longman Croup Ltd, London.
83. Jensen, M. (1984): "Teaching Interpersonal Communication through Novels Plays and FIlms." In S. Thomas (ed.): *Communication Theory and Interpersonal Interaction*. Albex Publishing Corporation, New Jersey.
84. Jone, T. (1984): "Intercultural Communication Research: A Burke's View" in S. Thomas (ed.). *Communication theory and international interaction*.

85. Kachru, B. (1980): "The Pragmatics of Non-native Varieties of English" in E. Smith (ed.): English for Cross-Cultural Communication. The Mc Millan Press, Ltd, Hong Kong.
86. Kaihara, M. (1974): "A comparative Study of Communication Patterns and Values in Costa Rica and Japan" in J. Condon and M. Saito. (eds.).
87. Kaplan, R (1980): " Cultural thought Patterns in Intercultural Education" in K. Croft.
88. Kilby, D. (1984): Descriptive Syntax and the English verb. Croom. Helm, London.
89. Kira, H.& Bucholtz, M. (1995). Gender Articulated: Language and the Socially Constructed Self. New York: Routledge.
90. Knapp, K. and Knapp, A. (1987): "Instated of an Introduction: Conceptual" Issues in Analyzing Intercultural Communication "in K. Knapp (ed.).
91. Knapp, K. (1987) (ed.): Analyzing Intercultural Communication. Mouton de Gruyter, New York.
92. Kreidler, S. and Kreidler, A. (1988): "Meaning, Culture and Communication» Journal of pragmatics, 12, PP. 725-742.
93. Kulick, D. (1992). Language Shift and Cultural Reproduction: Socialization, Self and Syncretism in a Papua New Guinea Village. Cambridge: Cambridge University Press.
94. Labov, W. and Fanshel, D. (1977): Therapeutic Discourse: w Psychotherapy as Conversation. New York, Academic Press.
95. Lado, R. (1964): Language Teaching: A Scientific Approach. TATA Mc Grow-Hill Publishing co. Ltd, New Delhi.
96. La Forge, G. (1983): Counseling and Culture in Second Language Acquisition. Pergamon Press, Oxford.
97. Lambert, W. (1977): "Culture and Language as Factors in Learning and Education' in R. Eckman (ed.): Current Themes in Linguistics, Washington Hemisphere.
98. Leech, G. (1983): Principles of Pragmatics. Longman Group Ltd, London.
99. Levinson, S. (1983): pragmatics. Cambridge University Press, Cambridge.
100. Lind, C. (1988): (1988): "The Quantitative Study of Communicative Success: politeness and Accidents in Aviation Discourse" Lang. Soc, 17, PP.375- 399.
101. Loveday, L. (1982): The Sociolinguistics of Learning and Using a Non-native Language. Pergamon Press, Oxford.
102. Lyons, J. (1977): Semantics. Vol.2, Cambridge University Press, Cambridge.
103. Maliki, M.S. (1991). The Role of culture in communication Failure: The Case of Moroccan Arabic and English Native speakers. Unpublished MA Thesis, Faculty of Letters and Humanities, Ain Chock, Hassan II University of Casablanca, Casablanca.
104. Maliki, M. S. & Khtira, M. (2019). Gender and Textbooks: First Year Baccalaureate Syllabus. Economic and Social Development: Book of Proceedings, 109-115
105. Maliki, M. S., Housni, H. & Biad, T. (2019). The Impact of Cultural Value Systems on Cross-Cultural Communication Success or Failure. International Journal of Innovation and Research in Educational Sciences 6 (3), pp. 459-473.
106. Maliki, M.S. & Housni, H. (2019). Linguistic diversity in Morocco: An Overview. Economic and Social Development: Book of Proceeding. 361-364.
107. Markham, P. and Latham, M. (1987): "The Influence of Religion Specific Background Knowledge on The Listening Comprehension of Adult Second – Language Students. » Language Learning, 37, N°2, pp. I57-I70.
108. Matsumoto, Y. (1988): "Reexamination of the Universality of Face: Politeness Phenomena in Japanese." Journal of Pragmatics, 12, PP.403-426.
109. McHoul, A. (1987): "An Initial Investigation of Fictional Conversations for Doing Conversation Analysis." Semiotica, 67, I/2, PP.83-I04.
110. McLeod, B. (1980): "The relevance of Anthropology to The Teaching of Culture". In K, Kroft.

111. McTears, M. (1987) "Communication Failure: A Development Perspective" In R. Reilly.
112. Miller, J. (1983): *Bilingualism, Culture and Education*. Routledge and Keegan Paul, London.
113. Moerman, M. (1988): *Talking Culture Ethnography and Conversation Analysis*. University of Pennsylvania Press, Philadelphia.
114. Morain, G. (1978): "Kinesics and Cross-Cultural Understanding" In M. Valdes(ed).
115. Morris, B. (1931): *Behind Moroccan Walls*. Library's Press, New York.
116. Morris, H. (1985): "The Remedial Episode as a Negotiation of Rules" in R. Street and N. Cappelletti (ed.): *Sequence and Pattern in Communicative Behaviour*. Edward Arnold.
117. Nadler, B. Nadler, M. and Broome, B. (1985): *Culture and The Management of Conflict Situation* In
118. Nuguchi, R. (1987): "The Dynamics of Rule Conflict in English and Japanese Conversations." *IRA*, XXV/ I, PP.15-23.
119. Okabe, R. (1984): "Cultural Assumptions of East and West: Japan and The United States" in R. Gudykunst (ed.): *Intercultural Theory: Current Perspectives*. Vol. VII, Sage Publications, London.
120. Parker, D. (1976): "Cultural Clues to the Middle Eastern Student" in M. Valdes(ed.).
121. Patterson, R. (1987): *A World Outside: The Fiction of Paul Bowles*. University of Texas Press, Austin.
122. Pei, M. (1956): *Language for Everybody*. Signet, New York.
123. Phelan, N. (1982): *Morocco is a Lion*. Quartet Books, London.
124. Povey, J. (1972): "Literature in TES Programs: The Language and The Culture." In B. Allen and R. Campbell (eds.).
125. Psathas, G and Anderson, T. (1990): "The 'Practices' of Transcription in Conversation Analysis". *Semiotica*, 78, 1/2, PP.75-99.
126. Raffler-Engel, V. (1980): "The Unconscious Element in Intercultural Communication" In St Clair and H. Giles (eds.).
127. Reilly, R. (1987) (ed.): *Communication Failure in Dialogue and Discourse*. Elsevier Science Publishers, B.V.
128. Richards, C. and Tay, M. (1980): "Norms and Variability in Language Use and Language Learning." » in Smith (ed.).
129. Richards, C. and Schmidt, R. (1983): *Language in Communication*. Longman Group Ltd, London.
130. Rings, L. (1987). "Krimhilt Face Work: A Sociolinguistic Analysis of Social Behaviour in The Nibelungenlied." » *Semiotica*, 65, 3/4, PP.317-325.
131. Rivers, W. (1981): *Teaching Foreign Language Skills*. University of Chicago Press, Chicago.
132. Robertson, I (1987): *Sociology*. Third Edition, Worth Publishers Inc., New York.
133. Robinson, G. (1985): *Cross-Cultural Understanding: Processes and Approaches for foreign Language, English as a Second Language and Bilingual Education*. Pergamon Press, Oxford.
134. Rokeach, M. (1985): *The Nature of Human Values: The free Press*, McMillan Publishing Co., Inc., New York.
135. Romney, K., Weller, S. and Batchelder, W. (1986): "Culture as Consensus: A Theory of Culture and Informant Accuracy." » *American Anthropologist*, 88, PP. 113-138.
136. Saleemi, A. (1985): "English in Non-native Use: A Second Language View." » *FORUM*, XXIII, N°2.
137. Saville-Troike, M. (1982): *The Ethnography of Communication*. Basil Blackwell, Oxford.
138. Schegloff, E. and Sacks, H. (1973): "Opening Up Closings" in R. Turner (ed.) *Ethnomethodology: Selected Readings*. Penguin, Harmondsworth.

139. Schegloff, E. (1987): "Some Sources of Misunderstanding in Talk-in-Interaction" *Linguistics*, 25, PP. 201-218.
140. Scherzer, J. (1987): "A Discourse-centered Approach to Language and Culture" *American Anthropologist*, 89, PP. 295-309.
141. Schisgal, M. (1966): *Typists New American Drama*, Penguin Plays.
142. Scollon, R. and Scollon, B. (1983): "Face in interethnic communication" in C. Richards and R. Schmidt (eds.).
143. Scupin, R. & DeCorse, C. R. (2016). *Anthropology: A Global Perspective*. 8th edition. Upper Saddle
144. River, NJ: Pearson University of North Carolina at Chapel Hill University Libraries, E-Research by
145. Discipline, Subject: Anthropology. Accessed 12 June 2019. <http://guides.lib.unc.edu/az.php?s=1107>
146. Searle, J. (1969): *Speech Acts: An Essay in the Philosophy of Language*. Cambridge University Press, Cambridge.
147. Silverstein, M. (1976). Shifters, Linguistic Categories, and Cultural Description. In *Meaning in Anthropology*. K. Basso and H.A. Selby, eds. Pp. 11–56.
148. Singh, R., Lele, J. and Marrohadjono, G. (1988): "Communication in a Multi-lingual Society: Some missed Opportunities" *Lang. Soc.*, 17, PP. 43-59.
149. Smith, L. (1987): "Introduction: Discourse Strategies and Cross-cultural Communication" in L. Smith (ed.).
150. Smith, L. (1987): *Discourse Across Cultures: Strategies in World Englishes*. Prentice Hall International Ltd.
151. Song-Chu, W. and Stephens, H. (1991): "Bicultural to be Bilingual" *FORUM*, XXIX, N°2. PP. 29-31.
152. Spears, A. K. (1999). *Race and Ideology: Language, Symbolism, and Popular Culture*. Wayne State University Press.
153. Spradley, J. (1972): "Foundations of Cultural Knowledge." In J. Spradley (ed.): *Culture and Cognition: Rules. Maps and Plans*. Chandler Publishing Company, London.
154. St Clair, N. Giles, H. (1980) (eds.): *The Social and Psychological Context of Language*. Edward Arnold.
155. Steffensen, M. and Joag-Dev, C. (1984): "Cultural Knowledge and Reading" in J. Alderson and A. Urquhart (eds.).
156. Steffensen, M. (1986): "Register, Cohesion and Cross-Cultural Reading Comprehension". *Applied Linguistics*, 7, no.1, PP. 71 -85.
157. Stern, H. (1983): *Fundamental Concepts of Language Teaching* Oxford University Press, Oxford.
158. Stern, L. (1987): "Expanded Dimensions to Literature in ESL / EFL: An Integrated Approach" *FORUM*, XXV, N°4. PP. 2-9.
159. Stevens, P. (1987): "Cultural Barriers to Language Learning" in L. Smith (ed.).
160. Stubbs, M. (1983): *Discourse Analysis: The Sociolinguistic Analysis of Natural Language*. Basil Blackwell, Oxford.
161. Tannen, D. (1985): "Cross-Cultural Communication" in T. Van Dijk (ed.).
162. Taylor, R. (1973): *Introduction to Cultural Anthropology*. Allyn and Bacon Inc.
163. The Holy Koran: ."(<https://www.al-quran.cc/18: Surah Al-Kahf>).
164. Thomas, J. (1983): "Cross-Cultural Pragmatic Failure" *Applied linguistics*, 4, N° 2, PP. 91-112.
165. Thomas, J. (1984): "Cross-Cultural Discourse as 'unequal Encounter': Toward
166. A Pragmatic Analysis." *Applied Linguistics*, 5/3 PP....

167. Ting-Toomey, S. (1988): 3 "Toward a Theory of Conflict and Culture" in W. Gudykunst et al (eds.).
168. Traugott, E. C. & Pratt, M. L. (1980). *Linguistics for Students of Literature*. HBJ Publishers, New York.
169. Trivonovitch, M. (1980): "Cultural Barriers" in K. Croft.
170. Tuttle, R. H. et al. (2019). *Anthropology*. Encyclopaedia Britannica. Encyclopaedia Britannica, inc. URL: <https://www.britannica.com/science/anthropology>. Access Date: April 07, 2020
171. Valdes, M. (1987): "Culture in. -Literature: " In M. Valdes (ed.).
172. Valdes, M. (1987): *Culture Bound*. Cambridge University Press, Cambridge.
173. VanDijk, T. (1985): *Handbook of discourse analysis*. Vol.4, *Discourse Analysis in Society*. Academic Press, London.
174. Varonis, N. and Gass, M. (1985): *Miscommunication in Native/non-native "Conversation"* Lang. Soc. 14, PP. 327-343.
175. Verschueren, J. (1984): "Linguistics and Cross-cultural Communication (Review Article)". Lang. Soc., 13, 489 -509.
176. Wetzel, P. (1988): "Are 'Powerless' Communication Strategies: The Japanese Norm?" Lang. Soc., 17, PP. 555-564.
177. Westermarck, E. (1930): *Wit and Wisdom in Morocco; A Study of Native Proverbs*. George Routledge and Sons, Ltd., London.
178. White, S. (1988): "Back, channels Across-Cultures: A Study of American and Japanese" Lang. Soc., 18, PP. 59-76.
179. Whorf, B. (1956): *Language, Thought and Reality*. (ed.) By Carel, MIT Press, Cambridge.
- Wierzbicka, A. (1985a): "Different Cultures, Different Languages, Different Speech Acts" *Journal of Pragmatics*. 9, pp. 145-178.
180. Wierzbicka, A. (1985): "A Semantic Metalanguage for a Cross-comparison of Speech Acts and Speech Genres" Lang. Soc., 14, PP. 491-514.
181. Wierzbicka, A. (1989): "Human Emotions: Universal or Culture-Specific". *American Anthropologist*, 88, PP. 484-593.
182. Wolfson, N. (1981): "Compliments in Cross-Cultural Perspective" in M. Valdes (ed.).
183. Zine-Dine, S. & Maliki, M.S. (2020). "Religious Educational Reforms and the Shaping of Moroccan Identity: Islamic Education Textbooks as a Case Study. "Book of proceedings of the 52nd International Scientific Conference on Economic and Social Development. Porto, 16-17 April, 2020.

NOVEL METHODOLOGIES TO EXPLAIN SMES' INTERNATIONALISATION

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ABSTRACT

Family firms are the oldest and most predominant form of business in the world, it represents 70 to 90 per cent of the global Gross Domestic Product (GDP). Family firms worldwide vary from micro and small firms to large corporations which dominate the global business panorama. Family firms are an area of research which has drawn rising interest given the impact and influence that such firms have on the economy worldwide. One of the key challenges that these firms face in today's globalized markets is internationalization. Although various scholars have studied the various factors which play a role in this process, it is indeed necessary to adopt a more integrated vision. Internationalization is, at its core, a strategic decision. Therefore, it is essential to implement a methodology which accentuates an integrated vision and, considers the role and interplay of the various aspects influencing this decision, and also highlights the existent interdependencies. Game theory is the study of decision making by various rational players where decisions made by a player have repercussions on the outcomes of the other players. Strategic interdependence is the essence of game theory. In this paper, we aim to shed new light on one of the most challenging topics in family business literature by using the robust analytical approach provided by game theory. The internal consistency and mathematical fundamentals of game theory make it a forefront strategic tool to study the complex decision-making process related to internationalization, which this chapter will explore. The literature review undertaken will also address policy recommendations since these may contribute to the internationalization process of these firms, which are so vital for our economic landscape, as well as enabling a better knowledge of the impact of policy actions on such processes.

Keywords: *Family Firms, SMEs, internationalization, game theory*

1. INTRODUCTION

Growth is an essential challenge for family firms, which, in their majority, are small and medium enterprises (SMEs). The founder of the family firm creates the firm as a consequence of an entrepreneurship behaviour of exploiting an opportunity but needs to maintain the original entrepreneurial orientation and increment it through generations (Kellermanns, et al., 2008). Succession has been the form of growth most studied in family firms, and this is in line with most studies that show that only a small minority of these firms outlive their founders. Additionally, there is a negative relation between small size and survival (Christensen, Suarez & Utterback, 1998). In order to aid these firms to thrive, increased generational involvement has shown to lead to more international and entrepreneurial behaviour.

Therefore, although the firm was based on the founder's initial entrepreneurial efforts, these seem to decrease over time (Corbetta, 1995; Zahra, 2003) but the latter generations can bring a “fresh momentum” to the firm (Salvato, 2004, p. 73). Cruz & Nordqvist (2007) consider that the second generation family firms tend to have a higher external orientation, this was also the conclusion of Casillas, Moreno & Barbero (2009) who concur that the second-generation of the family firm positively influence growth driven by entrepreneurial orientation and internationalisation efforts. In the world of today, which is highly dynamic, characterized by the high speed of transformation and driven by fast innovation, for family firms internationalisation is not only a strategic option, for growth, but rather an imperative for long term survive (Kontinen & Ojala, 2010). This is the reality that SMEs face too. Various methodologies have been used to study these firms' internationalisation process; it is a strategic decision that the firm needs to make, which is influenced by, and, impacts other stakeholders. Game theory is the study of decision making by various rational players where decisions made by a player have repercussions on the outcomes of the other players. Strategic interdependence is the essence of game theory. This chapter aims to shed new light on one of the most researched topics in family business literature by using the reliable analytical approach provided by game theory. The internal consistency and mathematical fundamentals of game theory make it a forefront strategic tool to study the complex process related to the international process, in its various dimensions. Resorting to game theory allows to formally and systematically analyse the prevalent strategic interactions. This chapter contributes better to understand internationalisation in family firms through a strategic lens. Our findings show the research which has applied this methodology in family firms and also intersect with this methodology the two core dimensions: family firms and the internationalisation. The results indicate that this methodology is still in its early stages of use in this area, suggesting this is a gap which future research should aim to contribute to addressing. We finalise by reflecting on the impact and limitations of our findings and suggest future avenues of research and possible novel methodological applications to be used in this field.

2. FAMILY FIRMS

Family firms are said to be the beginning of any form of business activity (Wakefield, 1995). These organizations dominate the economic landscape of all the major economies (Shanker & Astrachan, 1996; Heck & Stafford, 2001; Morck & Yeung, 2003; Dyer, 2003; Astrachan & Shanker, 2003; Chrisman, Chua & Litz, 2003), so much so that two-thirds of all enterprises worldwide are said to be family firms (Gersick, Davis, Hampton & Lansberg, 1997). Notwithstanding the importance of family firm worldwide, there is no global consensus on what is defined as a family firm. The European Commission (2009) indicates that family-owned firms represent more than 65% of all organizations in the European Union and 40% to 50% of employment and are therefore considered to be “(...) *crucially important for Europe* (...)”, by the President of the European Commission (Barroso, 2007). In Australia, family firms account for more than 70% of all businesses and in Latin America 65% to 90% and over 95% in the US, contributing in 40% to the American Gross National Product (GNP). In the United Kingdom family firms account for 70% of all enterprises in the private sector responsible for more 50% of the employment. In Portugal and Spain, these firms account for 70% and 75%, respectively, of the total of firms (International Family Enterprise Research Academy [IFERA], 2003). The importance attributed to family firms results from their presence but also due to the impact they have on the macroeconomic variables. Studies, in different countries, have shown that family firms play a crucial role in terms of economic growth as well as employment generation (IFERA, 2003; Anderson & Reeb, 2003; Neubauer & Lank, 1998; Poutziouris, 2001; Gallo, 1995). Although family firms are considered the world's most predominant form of business organization (Neubauer & Lank, 1998), there is still a lack of agreement as to their definition.

What is considered a family firm can be so varied that depending on the definition used, a total of 65% to 90% of all firms worldwide can be defined as family firms (Shanker & Astrachan, 1996). The majority of definitions of the family firm used by researchers have focused on family involvement, via ownership and/or management, or on firm intergenerational continuity. However, Westhead and Cowling (1998) used seven different definitions of family firms and applied them to a sample of 427 firms. They found that using the first of those definitions, more than 78% of the firms were defined as family firms but using the more restrictive definition (definition 7) only 15% classified. Although there is a lack of consensus with regards to the definition of family firm, the three cycles symbolic representation of the prevailing family firm paradigm (Moores, 2009; Tagiuri & Davis, 1996) has been widely accepted amongst scholars of family firms (Chrisman, Kellermanns, Chan & Liano, 2010; Distelberg & Sorenson, 2009; Heck, Hoy, Poutziouris & Steier, 2008). The three-cycle model (Tagiuri & Davis, 1992) shows the family business comprising three sets which are: ownership, family and business. The idea is that in the family firm, these three independent groups co-existent, interact and overlap. This configuration shows, through the lens of the general systems theory, that the family firm has characteristics which are common to other business systems but is, simultaneously, different from other firms due to the role played by the family subsystem which impacts the firm's cultural configuration and goal setting (Churchill & Hatten, 1987). Tagiuri and Davis (1992) contribute to the literature by showing that each set of people, in each group, have diverse goals, which can even be non-economic as proposed by Astrachan and Jaskiewicz (2008) and Gómez-Mejia et al. (2007), and this presents family firms with unique conflicts and challenges (Chrisman et al., 2010). The notion of family firm adopted in this chapter is the one presented by the European Union Expert Group on Family Business. The Expert Group was mandated to study the key challenges that family firms in the single market face, as well as to identify best practices in the area and recognize existing networks. Their findings and expertise are essential inputs for the European Commission on family business and SME relevant issues. They started by addressing the need for a commonly agreed-upon definition of a family firm in the European Union. They stressed that the adopted definition should be comprehensive, operational and comparable across the European Union. The definition presented, which was later approved, and has since been used by the European Union member states, reads (European Commission, 2009) that for a firm to be considered a family firm: “1) The majority of decision-making rights are in the possession of the natural person(s) who established the firm, or in the possession of the natural person(s) who has/have acquired the share capital of the firm, or in the possession of their spouses, parents, child or children's direct heirs; 2) The majority of decision-making rights are indirect or direct; 3) At least one representative of the family or kin is formally involved in the governance of the firm; 4) Listed companies meet the definition of family enterprise if the person who established or acquired the firm (share capital) or their families or descendants possess 25% of the decision-making rights mandated by their share capital”. The European Commission highlights (2009) that most SMEs (especially those that are small and micro) are family firms, and, simultaneously, that the vast majority of family firms are SMEs.

3. INTERNATIONALISATION

The family firm can grow inside the same geographical market or expand internationally. Researchers of family firm internationalisation are scarce although the topic has risen in interest in the more recent past. The sustainability of family firms depends on their capability to enter new markets and to generate new businesses and new products (Zahra, et al., 2004). Internationalisation is seen as very difficult for family firms (Graves, 2006). The ability to internationalize – especially in small businesses – may be prevented and discouraged by limited financial resources and poor managerial skill (Fernandez-Nieto, 2005; Graves & Thomas 2008).

In terms of funding, also the low awareness of government aid programs for internationalization, (Okoroafa, 1999) as well as the financing pecking order are additional obstacles for international growth of family firms (Gallo, et al., 2004). It is not just the difficulty in accessing the necessary capital but rather the internally designated preference order for its application which influences the international process (Claver, Rienda & Quer, 2009). Family ownership tends to have a negative effect on the scale and scope of internationalization (Fernández & Nieto, 2005; Graves & Thomas 2004). The desire to remain wholly family-managed makes it reluctant to involve external managers to obtain the required managerial capabilities for internationalization (Graves & Thomas, 2008). This reluctance includes the fear of having to change patterns of established behaviour (Gallo & Sveen, 1991). The conservative posture of the founders (Morris, 1998) and their aversion to risk taking (Sharma, et al., 1997) negatively affects the internationalization of family businesses. The importance given to stability and control is a common denominator of the founders of family firms (Mishra & McConaughy 1999). The focus of founders on stability, control, and wealth preservation tends to have a negative impact on the firm's growth beyond borders. The desire to maintain the independence and control of the company, choosing stability over change, relinquishing the importance of managerial skills, and avoiding risk-taking (Graves & Thomas, 2004; Zahra, 2003) explains why most of the family firms are established in local and domestic markets (Gallo & Garcia Pont, 1996; Okoroafo & Koh 2010). The risk-averse and control nature mentioned above translates in preferences of low debt to equity in family firms (Romano, Tanewski & Smyrniot, 2001; Blanco-Mazagatos, et al., 2007). The financial structure of family firms is another important factor which shapes its international endeavours. The attitudes and characteristics of the founders and the family firm's financial structure play an important role in its international aspirations. Also, the later generations can influence the ability of the family firm to internationalize because attitudes and behaviours can vary by generations (Okoroafo & Koh 2010). Therefore, managerial succession can be the key to innovation and international expansion (Graves & Thomas, 2006). Fernández and Nieto (2005), empirically show that the second and subsequent generations are more interested in international markets and more engaged in the internationalization process. Younger generations can facilitate internationalization because they have new ideas and new ways of thinking, are more cosmopolitan (travelling and speaking foreign languages) and academically better prepared (Gallo & Sveen, 1991). Although Okoroafo (1999) suggests the contrary, some studies (Fernández & Nieto, 2006) show that the presence of the second generation in the organization relates positively with the commitment and extent of the internationalization process of the family firm, this is in line with the findings of Casillas, et al., (2009) which partially supports that firm risk-taking will have a more intense influence on growth in the second generation. In terms of choice of mode of entry into the international arena, Gallo, Arimo, Manet, and Cappeyuns (2000) show that family firm's style and preference for control influence the ability to enter strategic alliances. With regards to international sales, family influence has a positive association but a negative effect in terms of the number of countries Zahra (2003). Claver, et al. (2009) identified family-specific factors that influence the choice of entry mode into foreign markets. They hypothesize that the presence of younger generations would adopt more demanding forms of internationalization, but this was not confirmed. In a study of the family firms in the Spanish wines industry, Fuentes-Lombardo & Fernández-Ortiz (2010), refer many reasons which might (or not) prompt family firms to establish strategic alliances as a means for internationalization. Okoroafo & Koh (2010) empirically show that the propensity of the family firm towards internationalization does not change with the entry of younger generations. Kellermans, et al. (2008) go further and say that the entry of new generation is more oriented to conformity and continuity with the previous generations rather than to opt to change, which can be a consequence of having become more risk-averse after succession (Kaye & Hamilton,

2004). The next-generation family members are often more concerned with wealth preservation rather than furthering wealth creation which can impede growth (Molly, Laveren & Deloof, 2010). In summary, only in certain circumstances can generational succession support the international expansion of the family firm (Graves & Thomas, 2008). SMEs in general and family firms in particular, are driven to new markets not only looking to grow but also in search of increasing their profitability (Lu and Beamish 2006; Oviatt and McDougall 1994). However, the limitations these firms encounter result from their reduced size, making it more difficult to reap the advantages of economies of scale and increased productivity, factors which add value in international markets (Paul, Parthasarathy & Gupta 2017). On the other hand, from the lens of the resourced based view of the firm, given the reduced resource endowment of such firms, they need to be more strategic when employing them in the international process. It is the underlining logic which explains the traditional Upsala internationalisation model which views the internationalisation process as dynamic and gradual, where the firm, phase by phase, slowly commits itself more to the process. Nevertheless, Born Global firms, which are outward-oriented prove that age or size are not constraints for family firms and SMEs, alike, to successfully develop their presence in diverse international markets even competing with larger multinational firms (Knight & Cavusgil, 2004; Oviatt & McDougall, 1994). Nonetheless, the support systems in place that encourage and aid family firms and promote SMEs to internationalise, play a crucial role in the success of the majority of such firms. In Europe, the European Commission encourages governments to intervene and promote the internationalisation of SMEs, through its various programs ranging from attributing financial support to providing information and operational aid. The Final Report of the Expert Group on Supporting the Internationalisation of SMEs (European Commission, 2007) addresses the various ways how those firms should be supported.

4. GAME THEORY

Game theory is the study decision making's strategic. Antoine Cournot's study of duopoly, in 1838, is considered one of the earliest examples of formal game-theoretic analysis. In 1921, the mathematician Emile Borel suggested a formal theory of games which was advanced by John von Neuman, in 1929, with his theory of parlour games. Only in 1944, with the publication of *Theory of Games and Economic Behavior*, by Morgenstern and von Neuman, game theory was established as a field in its own right. Their work demonstrated diverse possibilities of application of game theory in economics and the basic terminology and problem setup presented in that book, which is accredited to giving birth to game theory, is used to this day. In 1950, John Nash introduced the distinction between cooperative and non-cooperative games. He developed an equilibrium concept for noncooperative games, known as the Nash equilibrium. Since then, game theory has been applied to various areas in economics and has expanded to subjects such as, and not limited to political science, evolutionary biology, sociology, psychology, conflict management, design of auctions for resource allocation, problems of war and negotiation. Nash, jointly with John Harsanyi and Reinhard Selten, was awarded the Nobel prize for economics in 1994, for "*their pioneering analysis of equilibria in the theory of noncooperative games*" (Nobel Media, 1994). A game is a formal explanation of a planned situation. A game is defined by its players, their information set, the possible actions available to them, and their preferences and payoffs. The players are the agents (i.e. individuals, groups, firms) who make the decisions. Their payoff also referred to as utility, is a numerical value which shows the desirability of an outcome for that player. The payoff of each player is influenced by his actions but also by the actions of the other players. The strategic interdependence of the players is the cornerstone of any game.

5. FAMILY FIRMS AND GAME THEORY

The succession process of the family firm is essentially a strategic decision, involving the founder and the potential successors. Game theory methodology provides a rigorous and objective analysis on one of the most demanding challenges that the family firm faces. The use of game theory to study family firm succession is still in its very early stages and has mainly focused on factors related to the business dimension. Michael-Tsabari and Weiss (2013) applied the Battle of the Sexes game to study succession in family firms. They proposed that each of the players (father and son) has an objective relating to the firm (passing of the firm and running for the position, respectively) but also each player values avoiding tension and conflict in the family. They showed that deficient communication leads to disagreements and clashes between father and son. Earlier, Lee et al. (2003) studied the importance of the potential successor's ability as well as the degree of the idiosyncrasy of the business, on the choice of successor. They showed that in high idiosyncratic businesses, families tend to prefer a successor from inside the family. Burkart et al. (2003) model focused on the choice between leaving the public firm to the family or to a professional manager and how the legal environment shapes that decision. Bjuggren and Sund (2001) also evidenced the role of the legal setting. They used game theory analysis to study alternative ownership succession options, and the role legal and transactional costs played. Blumentritt et al. (2013) conceived a game where the children simultaneously chose whether to run or not for the CEO position and then the father would choose his successor. Their results showed that in a particular situation when both the children decided to run, then the father would compare each child's attributes. Founders who prefer having a successor who wants the job to one who is more capable of maximizing the firm potential but is not as interested will choose the child endowed with greater desire in detriment to the ablest. They referred that family tension can result from sibling rivalry. More recently, Mathews and Blumentritt (2015) presented a sequential game where the children chose the level of effort to pursue the family firm CEO position, given the father's preference for one of them. They identified the possibility of first-mover advantage for the child who decides first and acknowledged situations where discord among siblings could occur, but did not explicitly consider sibling rivalry in their payoff functions as a cost. Non-economic factors related to the family dimension were introduced by Jayantilal et al. (2016), concentrating on the emotive cost of conflict resulting from sibling competition. Their results showed that this cost is fundamental in terms of successor selection and that the collaborative family outcome is better in promoting firm intergenerational succession.

6. INTERNATIONALISATION AND GAME THEORY

Firms' internationalisation emerges from the firms' need to affirm, grow or survive to the increasing competitiveness of markets. Benefits from internationalisation are undeniable, and governments design incentive policies to promote a higher degree of internationalisation strategies. Recently, the European policy, COSME, covers a specific program which supports the internationalisation process of European SMEs where the prime focus is the export strategy (see also European Commission, 2010). An internationalisation strategy is an arrangement that enables the entry of a firm's products, services, technology or other resources in an international market (Root, 1987). This decision to embrace foreign countries is not a simple process, and economic analysis supports the firm option. The main barriers to this internationalization process of SMEs are limited market information, capital shortage, inadequate human resources, and lack of government support. Bjornali and Aspelund (2012) showed that the public incentives to exports lead to higher degrees of internationalisation of SMEs. Also, Krugman et al. (2012) studied the impact of an export subsidy on both foreign and national markets and explored a microeconomic analysis of public policies to promote internationalisation. The game theory is a new methodology to explore this problem since the strategic behaviour of players,

governments and firms, must be untangled and predicted. Subsidies are an attractive policy instrument because they improve the relative position of a domestic firm in a noncooperative competition setting with foreign firms. There are several papers, which explore this analysis using game theory methodology. Eaton and Grossman (1986) analyzed the welfare effects of public policy on trade, considering oligopolistic markets, and characterized the optimal public policy according to market structure. They concluded that a subsidy is indicated for a Cournot oligopoly and a tax is generally optimal for Bertrand competition. Brander and Spencer (1985 & 2008) presented the international noncooperative equilibrium of strategic trade policies from both domestic and foreign governments. As intervention by these governments may lead to a Prisoner's Dilemma, the importance of trade agreements arises. They discussed the impact and definition of international regulations, such as GATT regulations, in global markets. Dobre (2008) showed that public policy promotes higher export degree and the use of subsidy leads to changes in the firms' incentives to internationalise. Recently, Hwang et al. (2015) compared the impact on the welfare of optimal specific and ad valorem export subsidies and concluded that the welfare under the specific subsidy regime is lower than that under the ad valorem subsidy regime if there is a high social cost of taxation distortion.

7. CONCLUSION

Family firms play a primordial role in the global economy as major contributors in terms of employment and wealth generation. The majority of these firms are SMEs. Although there is a lack of a generally accepted definition of the family firm, there is a consensus that they differ from non-family firms. Various are the characteristics of family firms which distinguish them from non-family firms such as their long term orientation; risk-averse strategic nature; their inward orientation and harmonious working environments, to name but a few, which might play a role on determining their internationalisation efforts. Internationalisation, in its various dimensions, is fundamentally a strategic decision characterized by the interdependence between the firm and its diverse stakeholders (ex. government, competitors, regulators, and other). This chapter analysed the methodology of game theory as it provides a robust analytical way to study this interdependent decision making. Although the use of game theory in this field is not novel it is still in its early stages and this chapter contributes to its advancement by highlighting the work that has been done. In terms of methodology this chapter focused on the use of game theory to study internationalisation of family firms. An opportunity for future research, in terms of methodology, would be to extend this to include experimental economics. This is a methodology which has proliferated in recent times, but has never been employed to study the internationalisation of family firms (and SMEs). Experimental data contrasts observed behaviour with the theoretically predicted outcomes. The results obtained by the use of game theory would then be tested in the laboratory to study the robustness of the equilibrium solutions. In practical terms, the results of those finding could contribute, not only at a firm level but also, possibly, for governmental policy relating to programs and funding aimed at promoting the internationalisation of SMEs and family firms.

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LITERATURE:

1. ANDERSON, R., & REEB, D. (2003). Founding-family ownership and firm performance: Evidence from S&P 500. *Journal of Finance*, 58, 1301-1327.

2. ASTRACHAN, J. H., & JASKIEWICZ, P. (2008). Emotional returns and emotional costs in privately held family businesses: Advancing traditional business valuation. *Family Business Review*, 21 (2), 139-149.
3. ASTRACHAN, J.H., & SHANKER, M.C. (2003). Family businesses' contribution to the U.S. economy: A closer look. *Family Business Review*, 16(3), 211-219
4. BARROSO, J. M. D. (2007) *Europe's invisible giants: Family firms in an open, innovative economy*. Retrieved Jan 12, 2019, from http://europa.eu/rapid/press-release_SPEECH-07-675_en.htm?locale=en
5. BJORNALI, E. and ASPELUND, A. (2012). The role of the entrepreneurial team and the board of directors the internationalization of academic spin-offs. *Journal of International Entrepreneurship*, 10, 350-377.
6. BLANCO-MAZAGATOS, V., DE QUEVEDO-PUENTE, E., & CASTRILLO, L.A. (2007). The trade-off between financial resources and agency costs in the family business: An exploratory study. *Family Business Review*, 20, 199-213
7. BRANDER, J. and SPENCER, B. (1985). Export subsidies and international market share rivalry. *Journal of International Economics*, 18, 83–100.
8. BRANDER, J. and SPENCER, B. (2008). *Strategic trade policy*. *The New Palgrave Dictionary of Economics*. Second Edition. Eds. Steven N. Durlauf and Lawrence E. Blume. Palgrave Macmillan.
9. CASILLAS, J. C., MORENO, A. M. & BARBERO, J. L. (2009). Configurational approach of the relationship between entrepreneurial orientation and growth of family firms. *Family Business Review*, 23(1), 27–44.
10. CHRISMAN, J. J., CHUA, J. H., & LITZ, R. (2003). A unified systems perspective of family firm performance: An extension and integration. *Journal of Business Venturing*, 18, 467-472.
11. CHRISMAN, J. J., KELLERMANN, F. W., CHAN, K. C., & LIANO, K. (2010). Intellectual foundations of current research in family business: An identification and review of 25 influential articles. *Family Business Review*, 23 (1), 9-26.
12. CHRISTENSEN, C.M., SUAREZ, F.F., and UTTERBACK, J.M. (1998). Strategies for survival in fast-changing industries. *Management Science*, 44 (12), 207–220.
13. CHURCHILL, N. C., & HATTEN, K. J. (1987). Non market based transfers of wealth and power: A research framework for family business. *American Journal of Small Business*, 11(3), 51-64.
14. CLAVER, E., RIENDA, L., & QUER, D. (2009). Family firms' international commitment: The influence of family-related factors. *Family Business Review*, 22 (2), 125-135.
15. CORBETTA, G. (1995). Patterns of development of family businesses in Italy. *Family Business Review*, 8(4), 255-265.
16. CRUZ, C., & NORDQVIST, M. (2007). Environmental factors and entrepreneurial orientation in family firms: a generational perspective. In 3rd EIASM Workshop on Family Firm Management.
17. DISTELBERG, B. & SORENSON, R. (2009). A systemic examination of family businesses: A focus on values, resource flows and adaptation. *Family Business Review*, 22(1), 65-81.
18. DOBRE, C. (2008). Implication of Game Theory to International Trade. *Review Tinerilor Economiști: Economic Theories – International Economic Relations*.
19. DYER, W.G. (2003). The family: The missing variable in organizational research, *Entrepreneurship: Theory and Practice*, 27(4), 401-416.
20. EATON, J. and GROSSMAN, G. (1986). Optimal trade and industrial policy under oligopoly. *Quarterly Journal of Economics*, 101, 383–406.

21. EUROPEAN COMMISSION (2009). Final report of the expert group - Overview of family-business- relevant issues: Research, networks, policy measures and existing studies.
22. EUROPEAN COMMISSION (2007). The Final Report of the Expert Group on Supporting the Internationalisation of SMEs.
23. EUROPEAN COMMISSION (2010). Internationalisation of European SMEs. Final Report of Entrepreneurship Unit, DG Enterprise and Industry, Brussels.
24. FERNÁNDEZ, Z., & NIETO, M. J. (2005). Internationalization strategy of small and medium-sized family businesses: Some influential factors. *Family Business Review*, 18 (1), 77-89.
25. FERNÁNDEZ, Z., & NIETO, M. J. (2006). Impact of ownership on the international involvement of SME. *Journal of International Business Studies*, 37(3), 340-351.
26. FUENTES-LOMBARDO, G. & FERNÁNDEZ-ORTIZ, R. (2010). Strategic Alliances in the Internationalization of Family Firms: An Exploratory Study on the Spanish Wine Industry. *Advances in Management*, 3 (6).
27. GALLO, M. A. (1995). Family businesses in Spain: Tracks followed and outcomes reached by those among the largest thousand. *Family Business Review*, 8(4), 245-254.
28. GALLO, M. A & GARCÍAPONT, C. (1996). Important factors in family business internationalization. *Family Business Review*, 9 (1), 45-59.
29. GALLO, M.A. & SVEEN, J. (1991). Internationalizing the family business: Facilitating and restraining factors. *Family Business Review*, 4(2), 181-190.
30. GALLO, M.A., TÀPIES J., & CAPPUYNS, K. (2004). Comparison of family and non-family business: Financial logic and personal preferences. *Family Business Review*, 17(1), 303-318.
31. GERSICK, K. E., DAVIS, J. A., HAMPTON, M. M., & LANSBERG, I. (1997). Generation to generation: Life cycles of the family business. Boston: *Harvard Business School Press*.
32. GÓMEZ-MEJÍA, L. R., HYNES, K. T., NÚÑEZ-NICKEL, M., & MOYANO-FUENTES, H. (2007). Socioemotional wealth and business risk in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly*, 52, 106-137.
33. GRAVES, C., & THOMAS, J. (2004). Internationalisation of the family business: A longitudinal perspective. *International Journal of Globalisation and Small Business*, 1(1), 7-27.
34. GRAVES, C., & THOMAS, J. (2008). Determinants of the internationalization pathways of family firms: An examination of family influence. *Family Business Review*, 21 (2), 151-167.
35. HECK, R., HOY, F., PANIKKOS, Z, and STEIER, L. (2008) Emerging Paths of Family Entrepreneurship Research. *Journal of Small Business Management* 46(3), 317-330
36. HECK, R.K.Z. & STAFFORD, K. (2001). The vital institution of family business: Economic benefits hidden in plain sight. In (Eds.), *Destroying myths and creating value in family business*, 9–17. Deland, FL: Stetson University.
37. HWANG, H., MAI, C., and YANG, Y. (2015). Specific vs Ad Valorem Strategic Export Subsidies with Taxation Distortion. *Review of Development Economics*, 19(4), 820–828.
38. IFERA. (2003) Family Businesses Dominate. *Family Business Review* 16(4): 235-240
39. JAYANTILAL, S., JORGE, S. F. and PALACIOS, T. M. B. (2016). Effects of sibling competition on family firm succession: A game theory approach. *Journal of Family Business Strategy*, 7(4), 260-268.
40. KAYE, K. & HAMILTON, S. (2004). Roles of trust in consulting to financial families, *Family Business Review*, 17 (2), 151-163.
41. KELLERMANS, F.W., EDDLESTON, K.A., BARNETT, T. and PEARSON, A. (2008). An exploratory study of family member characteristics and involvement: Effect on entrepreneurial behavior in the family firm. *Family Business Review*, 21(1), 1-14.

42. KNIGHT, G., & CAVUSGIL, S. T. (2004). Innovation, organizational capabilities, and the bornglobal firm. *Journal of International Business Studies*, 35 (2), 124-141.
43. KONTINEN, T. and OJALA, A. (2010). The internationalization of family businesses: A review of extant research. *Journal of Family Business Strategy*, 1(2), 97-107.
44. KRUGMAN, P., OBSTFELD, M. and MELITZ, M. (2012). *International Economics: Theory & Policy*, 9th Edition. Pearson Education, Inc.
45. LU, J., & BEAMISH, P. (2001). The internationalization and performance of SMEs. *Strategic Management Journal*, Volume 22, 565-586.
46. MISHRA, C.S., & MCCONAUGHY, D.L. (1999) Founding family control and capital structure: The risk of loss of control and the aversion to debt. *Entrepreneurship Theory and Practice*, 23(4), 53-64
47. MOLLY V., LAVEREN, E. & DELOOF, M. (2010), Family business succession and its impact on financial structure and performance. *Family Business Review*, 23 (2), 131-147.
48. MORCK, R., & YEUNG, B. (2003). Agency problems in large business groups. *Entrepreneurship Theory and Practice*, 27, 367-382.
49. MOORES, K. (2009) Paradigms and theory building in the domain of business families. *Family Business Review*, 22 (2), 167-180
50. MORRIS, M.H. (1998). *Entrepreneurial Intensity*. Westport, CT: Quorum-Books.
51. NEUBAUER, F., & LANK, A. (1998). *The family business: Its governance for sustainability*. New York: MacMillan Press Ltd.
52. NOBEL MEDIA (1994). *The 1994 Nobel Prize in Economic Sciences*. Retrieved April 10, 2014. http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1994/
53. OKOROAFO, S. C. (1999). Internationalization of family businesses: Evidence from Northwest Ohio, U.S.A. *Family Business Review*, 12 (2), 147-158.
54. OKOROAFO, S.C., & KOH, A.C. (2010). Family businesses' views on internationalization: Do they differ by generations? *International Business Research*, 3 (1), 22-29.
55. OVIATT, B. M., & MCDOUGALL, P. P. (1994). Toward a Theory of International New Ventures. *Journal of International Business Studies*, 25(1), 45-64.
56. PAUL, J. & PARTHASARATHY, S. & GUPTA, P.I (2017). Exporting challenges of SMEs: A review and future research agenda, *Journal of World Business, Elsevier*, vol. 52(3), 327-342
57. POUTZIOURIS, P. (2001). The views of family companies on venture capital: Empirical evidence from the UK small to medium-size enterprising economy, *Family Business Review* 14(3), 277–291.
58. ROMANO, C.A., TANEWSKI, G.A. & Smyrniotis, K.X. (2001). Capital structure decision making: A model for family business. *Journal of Business Venturing*, 16(3), 285-310
59. ROOT, F. (1987). *Entry Strategies for International Markets*, Lexington Books.
60. SALVATO, C. (2004). Predictors of entrepreneurship in family firms. *The Journal of Private Equity*, 7(3), 68-76.
61. SHANKER, M. C., & ASTRACHAN, J. H. (1996). Myths and realities: Family businesses contribution to the US economy—A framework for assessing family business statistics. *Family Business Review*, 9 (2), 107-123.
62. SHARMA, P., CHRISMAN, J. J., & CHUA, J. H. (1997). Strategic management of the family business: Past research and future challenges. *Family Business Review*, 10(1), 1-35.
63. TAGIURI, R., & DAVIS, J. (1992). On the goals of successful family companies. *Family Business Review*, 5, 43-62.
64. TAGIURI, R., & DAVIS, J. (1996). Bivalent attributes of the family firm. *Family Business Review*, 9, 199-208.

65. WAKEFIELD M.W. (1995). *Antecedents of conflict in family firms - An empirical study*. University of Nebraska: Lincoln.
66. WESTHEAD, P., & COWLING, M. (1998). Family firm research: The need for the methodological rethink. *Entrepreneurship Theory and Practice*, 23(1), 31-56.
67. ZAHRA, S.A. (2003). International expansion of U.S. manufacturing family businesses: The effect of ownership and involvement. *Journal of Business Venturing*, 19, 495-512.
68. ZAHRA, S. A., HAYTON, J. C., & SALVATO, C. (2004) Entrepreneurship in family vs non-family firms: A resource-based analysis of the effect of organizational culture. *Entrepreneurship Theory and Practice*, 28, 363-381.

OIL REVENUES, FISCAL FRAMEWORK AND ECONOMIC DEVELOPMENT: THE CASE OF AZERBAIJAN

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ABSTRACT

The main objective of the study is to investigate and learn of the importance of economic diversification, development of non-oil sector and ways of rational use of oil revenues. Research work has been carried out on the basis of systematic analysis and methods. At the same time economic diversification policies have been reviewed and the results have been analyzed which applied in the oil-rich countries. The practical significance of the research is that, as a result of the implementation of complex measures proposed in the article that can be achieved macroeconomic stability and sustainable economic development regardless of oil revenues in Azerbaijan which it was justified by the evidence. At the same time, at result of the study found that oil-rich countries for reaching long-term economic growth and sustainable economic development should be able to develop the non-oil sector and obtain economic diversification. Besides, the continued focus on the overall rather than the nonoil balance, and the regular use of supplemental budgets to spend windfall oil revenues contribute to procyclicality of fiscal policy, risking costly boom-bust cycles. Against this background, this paper suggests several improvements to the framework for fiscal policy. The scientific innovation of research-the certain features and the ways of development of towards oil revenues to the non-oil sector has been found out and prepared proposals during practice by author.

Keywords: *Oil revenues, the development of non-oil sector, the non-oil sector*

1. INTRADUCTION

As an oil-producing country, Azerbaijan faces important challenges to its fiscal management. Oil revenue tends to show high volatility and uncertainty compared with other fiscal revenues owing to the volatility of oil prices and the uncertainty associated with the size and exhaustibility of oil reserves. As a result, today's choices about the rate of extraction of oil, investment in oil production capacity, , and the use of oil revenue have significant long-term economic implications. In addition, as oil revenue primarily originates from abroad in the form of export receipts, it can have a significant impact on the real exchange rate and the country's competitiveness depending on how the inflows of foreign currency are managed. Against this background, Azerbaijan has to consider a number of main questions regarding fiscal policy and the management of oil revenues and wealth. These include: how to assess the fiscal stance to better inform policy decisions; how to shield public expenditures and the non-oil economy from the high volatility in (and uncertainty about) oil revenue; and how to address sustainability and intergenerational equity issues (Khayati, A. (2019)). In recent years, Azerbaijan has not met these challenges as well as it could have. Fiscal policy has focused on the overall balance, rather than the nonoil balance. This has contributed to procyclical fiscal policies, which amplified the boom leading up to the crisis). With ongoing pressures to spend windfall oil revenues, sustainability and intergenerational equity issues have taken a back seat. A well-designed and systematically applied fiscal framework is needed to promote more effective policy implementation. Given the massive fiscal stimulus Azerbaijan undertook in response to the crisis, there is an urgent need to unwind the crisis-related measures and return to a sustainable fiscal position while oil prices are still high. A strengthened fiscal framework, alongside a more ambitious fiscal consolidation, would create a virtuous circle with reduced fiscal and economic

vulnerabilities, lifted up credibility, and higher growth. This paper suggests developments to strengthen Azerbaijan's fiscal framework. It includes specific recommendations to strengthen Azerbaijan's fiscal framework to bring it in line with best practice, and is organized as follows (Mauricio V., and Pablo L., 2009).

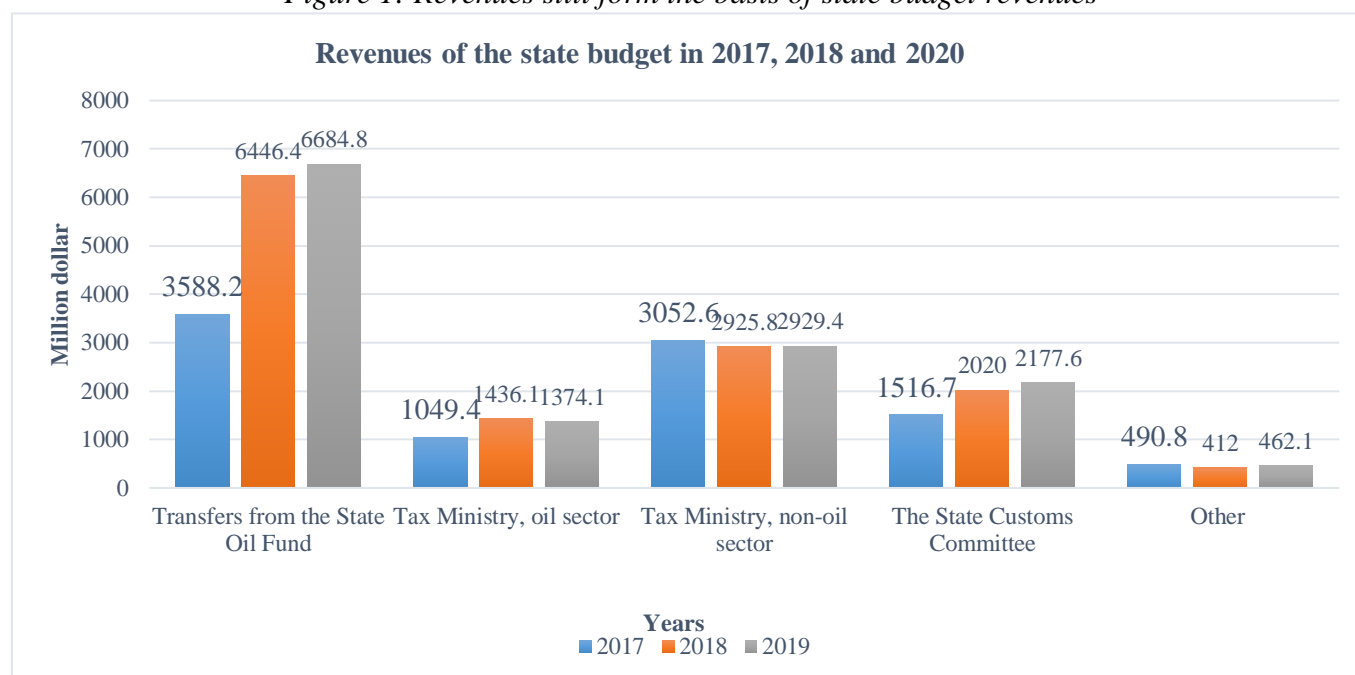
2. CURRENT SITUATION

Over many years rises and fall of world oil prices have been repeatedly reflected in the boom-bust cycles in oil-exporting countries the world over. The recent spectacular rise and equally spectacular fall in prices provides an opportunity to inquire whether anything is different this time. In this paper we limit the analysis to the experience, outlook, and long-term fiscal policy considerations for oil-producing countries and Azerbaijan. Because we are interested in gauging their fiscal vulnerability and sustainability from the angle of managing exhaustible oil wealth, we focus on the non-oil primary balance as the relevant indicator of how initial conditions and resource endowments can influence long-term considerations in several different models of fiscal rules (Robert Y. and Zaijin Z., (2009). Azerbaijan's legal fiscal framework goes in the right direction and includes the following elements.

- First, it has relied on the nonoil balance as a key fiscal indicator. The budget code includes a long-term nonoil deficit target of minimum percent of Gross Domestic Product (GDP).
- Second, to manage macroeconomic volatility and uncertainty and to account for the longer-term consequences of spending decisions, Azerbaijan uses a medium-term fiscal framework, underpinned by rolling three-year budget plans, to set fiscal policies.
- Third, Azerbaijan maintains oil fund which realize two functions: fulfills long-run saving and creates a store of value for future generations and collects funds for "rainy day".
- And finally, to ensure long-term fiscal sustainability (Vugar, B. (2011).

In recent years, the government has taken important steps to develop the non-oil sector in Azerbaijan. In addition, the economy has been diversified and many industries have been developed. However, oil revenues still form the basis of state budget revenues. We can see it in the Figure 1.

Figure 1: Revenues still form the basis of state budget revenues



Source: Finance Ministry

As Figure 1. shows that, oil revenues in Azerbaijan have a special share in the state budget. It also carries certain risks in terms of fiscal stability. In some oil countries better assessment, disclosure and management of fiscal risks—for instance the risks stemming from contingent liabilities, such as the deposit insurance scheme and risks associated with government stakes in non-financial enterprises—are also needed. The authorities' work to date to develop a methodology for assessing the sustainability of borrowing of state-controlled enterprises and to introduce limits on the size and profile of external borrowing by these enterprises are positive steps in this regard. International experience suggests that a fiscal rule, backed by strong political support, can help to anchor fiscal policy and achieve balanced economic growth. Some economists suggest two approaches: the long-term nonoil deficit which was used during the global financial crisis (for example in Russia), an oil-price rule, where revenue above a certain oil price is saved in the oil funds (Charleen G. and Zakharova D. 2019). An oil-price rule can seem appealing because it is easy to communicate and could help to delink government expenditure and the economy from oil price volatility. However, it would still be a second-best alternative to the nonoil deficit rule since it does not necessarily preserve the wealth from oil for future generations as a nonoil balance target does. Moreover, to be an effective fiscal anchor, the oil-price rule must be supplemented with a ceiling on expenditure to avoid procyclical fiscal policy. In countries with short reserve horizons, ensuring long-term sustainability should be the main focus of the fiscal framework. Pressures in countries running a large non-resource primary deficit could arise well ahead of the time when resources are exhausted. To prevent this outcome, fiscal policy should be anchored in the non-resource primary balance (NRPB) target derived from applying three possible methodologies: the Permanent Income Hypothesis (PIH), the Modified Permanent Income Hypothesis (MPIH), and the Fiscal Sustainability (FS) approach.

- The traditional PIH framework sets the fiscal target (NRPB) at a level that is consistent with future financial wealth. Under this approach, the NRPB remains constant over time, and is financed by the rate of return on the net present value of projected resource revenues, so that the resource wealth remains constant over time and is never depleted.
- The MPIH can help accommodate a more front-loaded spending path than allowed under the PIH. Instead of preserving financial wealth at a constant level over time, the MPIH allows financial assets to be drawn down for a few years during an initial scaling-up period. The drawdown would, however, need to be offset by fiscal adjustment in the future, to rebuild financial assets to the same level as under the traditional PIH.
- The FS framework accounts for the potential impact of the scaled-up spending on growth and non-resource revenues. This is a significant departure from the MPIH. An NRPB allowing a drawdown of government wealth to build human and physical capital and eventually stabilizing it at a lower level than under the PIH or the MPIH can still be consistent with fiscal sustainability objectives. Lower financial wealth will however generate a lower stream of resource-related income to the budget, resulting in a lower NRPB. Fiscal spending can still be stabilized at a higher level because higher growth will generate larger non-resource revenues.

In countries with long reserve horizons, managing volatility should be the main focus of the fiscal framework. Price volatility can lead to procyclicality and undermine sustainability. For example, resource revenue surges may induce spending increases, generating a fiscal impulse—as measured by changes in the NRPB—that is large in relation to existing supply, thus reinforcing economic cycles and volatility. Sustainability issues arise when commodity producers spend more than their expected long-term resource revenues. This can occur when they extrapolate temporary increases in prices and misprice their resource wealth, and/or fail to

maintain appropriate fiscal buffers to sustain current spending levels. All these actions can lead to the boom-bust cycles so often seen in commodity-producing countries. In these cases, a structural primary balance derived from a price-based smoothing rule can be useful to anchor fiscal policy. A simple way to mitigate the impact of price volatility is to target an overall primary balance based on a “notional” price that includes either backward looking prices, futures prices, or some combination of the two. The primary balance computed in this way is called “structural” since it is based on some underlying commodity price (rather than just the current one). This simple rule can be intuitive for policy makers since it includes resource revenues in the fiscal target (differently from the “pure” NRPB); it can also help support solvency through prudent forecasting of structural revenues by deliberately under-projecting the sustainable resource price. The choice of the price formula reflects a tradeoff between a preference for smoothing expenditures (when a longer smoothing period is chosen) and a need to adjust to changes in price trends (when a shorter moving average is selected), with implications for financial savings. A complementary expenditure growth limit can help reduce procyclicality. This extended rule can limit the growth of government spending in nominal or real terms, or as a percent of non-resource GDP. Such a rule is desirable to guide the scaling up of public investment where there are absorptive capacity constraints and where the volatility of resource windfalls require precautionary savings). It also helps smooth out volatility because it sets floors and ceilings for spending growth (Berg et al., 2012).

3. WHAT MUST BE DONE FOR SUSTAINABLE MACROECONOMIC DEVELOPMENT?

Oil countries will need to reformulate its fiscal framework to take into account potential revenue from natural resources. If natural resources prove to be commercially viable and sizeable, oil countries will become a commodity-producing country. Under these circumstances, it is an absolute prerequisite for the design of a prospective framework to set a fiscal regime appropriately—as this is the first step to attract investors and ensure a sustainable and sound development of the resource sector. This step should be followed by setting macro-fiscal anchors and supporting institutions. From a macro-fiscal perspective, exhaustibility and price volatility of natural resources will gain special importance for fiscal policy formulation. Exhaustibility raises issues of sustainability and intergenerational equity and calls for need for massive fiscal adjustment once resource wealth has been depleted. Price volatility complicates fiscal planning because it leads to revenue volatility and might require the adoption of certain fiscal rules to limit procyclicality. The relative importance of these objectives is likely to vary by country circumstances, such as the degree of resource dependence and the reserve horizon. An aggressive borrowing policy in anticipation of future resource revenues or excessive zeal to maintain government participation in all development projects could be counterproductive, given the uncertainty about the fiscal regime as well as the magnitude and temporal profile of the expected resource revenues. Even if these profiles of the revenues are in line with the assumptions behind the baseline or alternative scenario, the associated resource revenues are expected to be only moderate in size by international standards. This suggests that a very prudent approach to fiscal policy should be exercised when managing natural resources. The broad design of the fiscal regime for the sector proposed in draft legislation (not yet approved by cabinet) seems to be appropriate. The regime is a combination of a modest royalty, profit-based production sharing,. Royalty will generate government revenue from the start of production; production sharing based on the R-factor is likely to achieve a higher government share from highly profitable projects, while providing a relief to investors in times of low prices or high costs; and the imposition of the standard CIT will ensure that the sector receives the same corporate tax treatment as other sectors of the economy. Moreover, the four regime options modeled here appear to generate a government take in line with that observed in other petroleum

producing countries in the region and elsewhere. However, a more precise government take will only be known once bids are received and blocks awarded. The prospective macro-fiscal anchor should initially be focused on ensuring fiscal sustainability and intergenerational equity. The preferred option would be to focus the framework on ensuring sustainability and intergenerational equity, with fiscal anchors preferably determined by the MPIH framework or the FS framework that both account for the scaling up of public investment. If substantially more resources are confirmed, the first option could be superseded by the second one that focuses the framework on managing volatility, with fiscal anchors determined by the price-based structural balance frameworks. Both the price-based structural balance and its modification to limit expenditure growth could be of relevance for Lebanon, given its susceptibility to procyclicality and weak institutional capacity (Mariusz J. et al., 2014). Complementary fiscal institutions: *Azerbaijan* should create an independent fiscal agency. Currently, there is no independent agency responsible for producing or evaluating the macroeconomic and fiscal projections in the budget, or evaluating the government's proposed fiscal policies. An independent fiscal agency should be established to provide the government with alternative macroeconomic and fiscal forecasts, analysis of fiscal policy under various scenarios, and independent assessments of compliance with the fiscal rule. This agency could be established either outside or within the Ministry of Finance. *But*, good rules and fiscal agencies cannot be a substitute for fiscal discipline as rules can be abandoned or circumvented, underscoring the need for political support for such arrangements. In this paper, we address how Oil Producing Countries' fiscal framework will need to be reformulated to take into account potential resource revenue. Designing a fiscal regime appropriately is an absolute prerequisite to make sure the government can receive a fair share of the resources while investors face appropriate incentives to invest and *improve* the sector. This step should be followed by setting macro-fiscal anchors and supporting institutions. The prospective framework should initially be focused on ensuring fiscal sustainability and intergenerational equity. Strong institutional arrangements also need to underpin the prospective framework, to ensure that the pace of resource wealth's use is set in line with Azerbaijan's capacity constraints.

4. CONCLUSIONS AND RECOMMENDATIONS

In general, the non-oil sector in oil countries needs to be developed, the economy must be diversified, and the dependence of budget revenues on oil revenues should be eliminated. At the same time, domestic production should be increased and taxes should be increased to ensure budget revenues. Besides, strong institutional arrangements need to underpin the prospective framework, with the pace of resource wealth use set in line with capacity constraints. Key components include:

- A credible commitment to macro-fiscal stability and effective use of resource wealth should be underpinned by a strong *public financial management* (PFM) system. Specifically, reforms should include:
 - 1) transparent and comprehensive presentation of petroleum revenue and non-resource fiscal position;
 - 2) budgets should focus on medium term, with strong revenue forecasting framework in place;
 - 3) the coordination and selection of public investment projects needs to be strengthened;
 - 4) (iv) adherence to the EITI (the Extractive Industries Transparency Initiative) initiative would be highly advisable.
- Adopting a fiscal responsibility law could strengthen fiscal discipline by anchoring fiscal decisions on a rule-based framework. Key elements of the design would include:
 - 1) clear goals and instruments with a strong enforcement mechanism;
 - 2) monitoring and communication, broad coverage of fiscal activities;

- 3) flexibility; and legally binding framework.
- Establishing a SWF (*sovereign wealth fund*) could enhance the framework. Such fund exists in Azerbaijan. This fund provides for efficient management of oil revenues and equitable distribution across generations. Key elements of the design would include:
 - 1) adequate framework; clear objectives;
 - 2) consistency with macro-fiscal framework;
 - 3) flexible inflow/outflow rules; and robust governance structure. It is however important to emphasize that in the absence of a strategy for fiscal consolidation and debt reduction, discussions of SWFs would be misplaced; or in other words, it might be fruitless to accumulate assets in a SWF while the government continues to accumulate significant liabilities elsewhere.
 - Establishing an independent fiscal council could further strengthen the framework by enhancing the quality of budget discussions and fostering greater transparency.
 - *Assessing the fiscal stance*: Oil countries should focus on the nonoil balance as a fiscal anchor. Consistent use of the nonoil deficit as the key indicator of fiscal policy would provide an anchor for fiscal policy, independent of volatile commodity prices. As reliable estimates of nonoil GDP for oil countries become available and estimates of potential output growth are refined.
 - *Managing macroeconomic volatility and uncertainty*: Oil countries should avoid excessive use of supplemental budgets, use conservative oil price assumptions in the budget, and replenish the Reserve Fund. Specifically: oil countries should make a decisive break with its past practice of excessive use of supplemental budgets—this practice undermines the credibility and usefulness of the medium-term fiscal framework and can contribute to the procyclicality of fiscal policy.
 - It should also use conservative oil prices in the budget.
 - Last, the Reserve Fund (The name may differ in different oil countries) should be replenished in order to allow it to continue to play its helpful shock-absorbing role for the oil countries's economy (Mariusz J. et al., 2014).

LITERATURE:

1. Charleen G. and Zakharova D., (2012), Strengthening Russia's Fiscal Framework (IMF), 3-5, 20-25.
2. Berg, Andrew, Rafael P., Chu-Shun S. Yang and Luis F. Z., (2012), Public Investment in Resource Abundant Low-Income Countries (IMF), 21-27.
3. Mariusz J, Diego M. P., and Najla N., (2014), Designing a Fiscal Framework for a Prospective Commodity Producer: Options for Lebanon (IMF), 11-16.
4. Robert Y. and Zaijin Z., (2009), Fiscal Vulnerability and Sustainability in Oil-Producing Sub-Saharan African Countries (IMF) 4-8.
5. Mauricio V., and Pablo L., (2009), Fiscal Policy in Oil Producing Countries During the Recent Oil Price Cycle (IMF), 3-8.
6. Vugar, B. (2011), Managing Resource Revenues in Oil-rich Carec Countries: The Case of Azerbaijan. Baku, Azerbaijan: Center for Economic and Social Development. 60-63.
7. Khayati, A. (2019), The effects of oil and non-oil exports on economic growth in Bahrain. *International Journal of Energy Economics and Policy*, 9(3), 159-161.
8. Hamilton, J.D. (2010), Nonlinearities and the Macroeconomic Effects of Oil Prices. Working Paper, No. 16186.
9. Humbatova, S.I., Gasimov, R.K., Hajiyeve, N.G.O. (2019), The impact of oil factor on Azerbaijan economy. *International Journal of Energy Economics and Policy*, 9(4), 381-387.

10. Humbatova, S.I.Q., Garayev, A.I.O., Tanriverdiev, S.M.O., Hajiye, N.Q.O. (2019), Analysis of the oil, price and currency factor of economic growth in Azerbaijan. *Entrepreneurship and Sustainability Issues*, 6(3), 1135-1153.
11. Jimenez, R.R., Sanchez, M. (2005), Oil price shocks and real GDP growth: Empirical evidence for some OECD countries. *Applied Economics*, 37, 201-228.
12. Khayati, A. (2019), The effects of oil and non-oil exports on economic growth in Bahrain. *International Journal of Energy Economics and Policy*, 9(3), 159-161.
13. Mukhtarov, S., Mammadov, J., Ahmadov, F. (2019), The impact of oil prices on inflation: The case of Azerbaijan. *International Journal of Energy Economics and Policy*, 9(4), 97-102.
14. Norwegian Petroleum Directorate. (2019), Resource Report, Ministry of Petroleum and Energy.
15. Odhiambo, N.M., Nyasha, S. (2019), Oil price and economic growth in Kenya: A trivariate simulation. *International Journal of Sustainable Energy Planning and Management*, 19, 3-12.
16. Vugar, B. (2011), Managing Resource Revenues in Oil-rich Carec Countries: The Case of Azerbaijan. Baku, Azerbaijan: Center for Economic and Social Development. p60-63.

PRINCIPLES OF FINANCIAL PROVISION OF THE MILITARY FORCES

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ABSTRACT

Strategic decisions what defense capabilities our country needs in response to the dynamic changes in the security environment, have a direct relationship with the question „how much?“, what is the price that taxpayers should pay for the creation and development of these capabilities. And since security and defense are a public good the creation of which is entirely depending on the economic potential of the created GDP of the country, the manifestation of the price of that good is the budget of the Ministry of Defense. This makes necessary the implementation of an appropriate system and means for management of budgetary resources, by means of which to bring to an increase the added value of defense capabilities. It comes to financial management, which gives an answer to the sources, the planning and control of the effective spending of budgetary resources for security and defense.

Keywords: *Financial provision, Military forces, Security and defense, Management*

1. INTRODUCTION

Strategic decisions what defense capabilities our country needs in response to the dynamic changes in the security environment, have a direct relationship with the question „how much?“, what is the price that taxpayers should pay for the creation and development of these capabilities. And since security and defense are a public good the creation of which is entirely depending on the economic potential of the created GDP of the country, the manifestation of the price of that good is the budget of the Ministry of Defense. This makes necessary the implementation of an appropriate system and means for management of budgetary resources, by means of which to bring to an increase the added value of defense capabilities. It comes to financial management, which gives an answer to the sources, the planning and control of the effective spending of budgetary resources for security and defense. Put another way, the financial management system of the Ministry of Defense is a manifestation of the interaction of the management and resource provision subsystems in an organization. The management subsystem is related to strategic decisions on achieving the targeted capabilities and their future viability in a dynamically changing security environment. Hence the establishment and maintenance of uniform set of forces and defense capabilities is a strategic objective of MF (military forces) of our country. This means building flexible and expeditionary units, capable of performing tasks in the full spectrum of missions and operations, equipped with modern technological equipment, supported by integrated logistics, capable of operating in a network-type environment, interoperable with allies troops and forces, with highly trained professional staff, to be financially secured and in compliance with the principles of economic viability in the management of resources for security and defense. Accordingly has been set the objective of our scientific research, namely - studying the role of financial provision for streamlining management solutions for economical, effective and efficient spending of resources for security and defense.

2. FINANCIAL SECURITY - BASIS OF STRATEGIC DECISIONS OF THE MANAGEMENT OF RESOURCES FOR SECURITY AND DEFENSE

Starting point of the financial provision of the military forces is a system of financial management in the Ministry of Defense, which should ensure the effective management of resources for security and defense, by fulfilling its functions, giving an idea of its elements. The elements of the financial management system cover the processes of planning the budget by individual programs and by paragraphs of the Unified Budget Classification (UBC), the ongoing management of the budget through the year, the management of payments through the System for Electronic Budget Payments (SEBRA) the management of investment costs and cost of material and technical supply during the accounting year, accounting and analysis, and financial management and control (Petrova, Petrov, 2020-c). Depending on the powers of officers allocating budgetary credits, the responsibilities and obligations in the allocation and management of budgetary resources and increasing costeffectiveness, the System for financial management in MoD operates on three levels. At the first level stays the Minister of Defense, as senior budgetary credits allocating officer, assisted by the Planning, Programming and Budget and Finance directorates. The function of the Minister of Defense, as primary budgetary credits allocating officer on organizing the processes of planning, programming and budgeting defense resources, shall be carried out by the Director of Planning, Programming and Budget directorate. The functions of budget implementation and execution of payments as well as the current budget implementation according to the State Budget Act are carried out by the Director of Finance directorate. On the second level stay the secondary budget allocating officers to the Minister of Defense, appointed by a Decree of the Council of Ministers (CoM) and the third level comprises the budget allocating officers of a lower level, such as military units. The mechanisms of budgetary funding of the secondary budget allocating officers and the operations of the MF in accordance with the mission, their objectives and tasks, are determined annually by Budgetary Guidelines for spending the budget. According to the doctrine of financial provision, a major source of financial resources for the activities in the field of defense, is the state budget and other sources provided by law or act of the MoD. Other sources comprise own income, target funds, regulated by decisions of the Parliament and normative acts of the Council of Ministers, and programs with external financing or foreign participation. In accordance with the mission and tasks of the MF, financial provision is subject to certain rules and logic. The fundamental principles of the financial provision of defense capabilities development are: integrated defense, sufficiency of defense resources, prioritization of their spending, compatibility and modularity of the existing military formations, effectiveness, relevance and efficiency in planning and programming defense resources, continuity and consistency, comprehensiveness, avoidance of duplication, transparency in the allocation and spending of defense resources, correlation between defense capabilities and budgetary resources. Observance of those principles is the basis of a balance between the needs for defense capabilities, the economic potential and capabilities of the country, and from here - the available defense resources, focus and comprehensiveness, consistency, prioritization, predictability and multi-variability of planning, efficiency and transparency in planning and spending, hierarchy, continuous management and control, analysis and evaluation of risks and threats. These also constitute the main functions of the financial management of the Ministry of Defense, based on the planning, programming and budgeting. Since the completion of the three missions of the MF is in direct connection with defense resources, their prediction and securing is the basis for the preparation of the Strategic Action Plans of MF (SAPMF), Permanent Defense Plan (PDP) Emergency Plan (EP). Their development takes place in peacetime, while an integral part of them constitutes Annex FF - Financial Provision with its annexes FF-1- Funds Provision and FF-2- Contracts Conclusion. Financial provision of the operations of the MF on mission Defense is in accordance with the planned resources for the defense programs of the MoD, the

structures directly subordinated to the Minister of Defense and Bulgarian Army for a six-year period, specified in the annual budgets of the Ministry of Defense. Financial provision of the operations of MF on mission Support for the International Peace and Security, is done through planning, construction and maintenance of Necessary Operative Capabilities (NOC) of the declared to NATO and EU military units for participation in missions and operations outside the country within the frame of defense programs of MoD, the structures directly subordinated to the Minister of Defense and Bulgarian Army, consistent with the principles of the EU and NATO. This means that the sources of financial resources for the acquisition of military capabilities of NATO are the following (Georgiev, 2019-b; Nichev, 2009; Petrov, Georgiev, 2019c; Terziev, Madanski, Georgiev, 2017-a; Terziev, Georgiev, 2017b):

- National financing;
- Multinational financing, expressed in arrangements outside the NATO bodies, between two or more Member States on international cooperation projects and on joint acquisition of skills, as an expression of „smart defense”;
- Co-financing, which is a special kind of multinational financing pursuant to regulating documents of NATO, under which participating countries have defined the requirements, priorities and participation share. This financing is done under the political and financial oversight of NATO, which ensures its transparency (on this basis is organized the financing of the programs of NATO for early warning and control of air - AWACS, for Alliance Ground Surveillance - AGS, to acquire capabilities for strategic air transport SAC, C-17);
- Common financing, which is applied in cases where the acquisition of military capabilities cannot be financially provisioned through the above mechanisms, which requires financing to be provided by share contributions of Member States through the formation of funds for common funding of NATO. It comes to the financing of NATO headquarters and the headquarters of the military command structure of NATO, the Command and Control system, the requirements to achieve interoperability in the planning and conduct of operations, and for planning and conducting exercises. Sources of common financing are civilian budgets, military budgets, the NATO Security Investment program. Common funding is realized under pre-approved spending limits for the year, pre-approved share contributions, while each type has its own rules and procedures for financial management and the management of each type is executed by a different committee representing the parties providing financial resources. Thus common funding contributes to the cohesion of NATO, ensuring its military capabilities, priorities and observance of its requirements and not least it complements national funding. Eligibility criteria for common funding are the presence of a valid military requirement and financial eligibility of the necessary capacity within the spending limits. Thus common funding puts the focus on those capabilities, the funding of which is over and above those ensured through national funding. It provides adaptability and speed of the capabilities required in crisis management. It allows maximum use of national military, civilian and NATO infrastructure facilities. Through it the military requirements are brought in line with the objectives and priorities of NATO's Strategic Concept, the Concept of minimum requirements for capabilities. Conditions are created for financial provision of essential critical military requirements, stemming from regional risk factors and strategic interests of NATO. Using common funds for financing is done on criteria set by the Board on Policy and Resource Planning of NATO;
- Coalition of the willing parties, which serves to finance specific activities, described in the program memorandum or in a project plan, defining the specific roles and responsibilities of the parties involved;
- National contribution, which is expressed in the participation of Member States with nonfinancial resources (infrastructure facilities, personnel, means of communication and information services, etc.);

- Trust funds, used for management of voluntary financial contributions for a particular cause, thus allowing for the participation of countries which are not members of NATO.

Noteworthy is the diversity of forms and ways of accumulating financial resources for NATO operations, in direct relation to which are the operations on mission Support for International Peace, which is determined by the diversity of these operations and the strategic objectives and priorities of NATO. This requires compliance with the general principles of financing of NATO operations, stemming from the fundamental principle „Costs lie where they fall”. Put another way, this means the cost to be borne by those who caused them, while the common funding is focused on covering the cost of the deployed on the combat theatre staffs, and the critically important for the strategic theater infrastructure (roads, ports, airports, railway transport, etc.). It should be taken into consideration that the common funding of NATO operations does not allow for a financial provision of state-building and building of state institutions. It is not a means for solving problems in the generation of forces and resources. The administration, management and financing of the common costs of EU operations and the creation of capabilities for rapid response and capabilities for humanitarian and rescue operations, is carried out through the so-called ATHENA, mechanism, whose annual budget for operations (aside from the contributions of the Member States in a rate approved by the Committee of the GDP of the country) is approved by a committee of representatives of the Member States. The planning and conduct of rapid response operations is carried out through an Early Financing System. Generated costs for the participation of military units of the Member States of EU in operations and missions of the EU, are at the expense of the sending nation. Planning, building and maintenance of the necessary defense capabilities of modular military formations in the composition of the various types of MF for activities on mission Contributing to National Security in Peacetime are provisioned in terms of resources by the defense programs of MoD structures directly subordinated to the Minister of Defense and Armed Forces. Reimbursement for MF participation in such operations is in accordance with the Rules of Organization and Procedure of the Inter-ministerial Commission for Recovery and Support to the COM. The activities and tasks of the mobilization and defense training within state bodies and budget organizations are financed from the state budget, while those carried out in the municipalities-within the delegated by the state funds under the Defense and Security function- and from other sources, provided in law or act of the COM. Financial provision of the activities and tasks on defense-mobilization and preparation of legal entities (LE) with wartime tasks, is made through budgets of the respective primary budget spending allocators under contract relationship with LE. Financial planning is carried out after prior consultation with the MoD, depending on the priorities before the start of the annual budgetary procedure. The financial provision of activities for determining the wartime needs of the country for military and civil production and services, the assignment of wartime tasks, developing plans and programs in peacetime, is made from the state budget, respectively from the funds for the delegated by state defense activities carried out by municipalities. If provided by a legislative act or an act of the Council of Ministers, the financing may be taken from other sources. In wartime the provision of funds is made by the wartime budget of the country in accordance with the methodology for preparing and implementing the wartime budget and the budgetary guidance to public authorities, local governing bodies and local administration (Dimitrovski, Pushova, Georgiev, 2017c-d;). Noteworthy is the diversity of sources of financial provision for the execution of the mission and the objectives and tasks of the military forces. Their economical, effective and efficient spending is directly dependent on the effective interaction between bodies and structures at different levels, which is the basis for streamlining the management of resources for security and defense (Hristov, Georgiev, 2017e-f; Madanski, Georgiev, 2017g-h).

3. CONCLUSION

Without claiming to be exhaustive in the study of the problems, we believe that best practices of financial management in the public sector constitute the basis for management of security and defense resources in accordance with the principles of market oriented of behavior. This by itself is in support of the thesis that management of defense should be treated as an economic activity whose specifics lie in the functioning of the Integrated System for Defense Resources Management, as part of the System for Development of the Military Forces, based on program-objective approach to resource provision of the capabilities objectives. Moreover, such an approach is in response to the allocation of budgetary resources according to agreed priorities and defense policy of a country. On the other side stays the economical and effective use of these resources and the civilian control of which and how much of taxpayers' resources shall be used for the public good security and defense of the country and the acquisition of the needed by the MF new operational capabilities adequate to the dynamic changes in the security environment.

LITERATURE:

1. Dimitrovski, R., Pushova, L., Georgiev, M. (2017c). The Balanced Scorecard Model as a tool for effective management. // International Journal of Scientific papers. Institute of Knowledge Management, Skopje, 17, 2017, N 2, pp. 1023-1027, ISSN 1857-923X (for e-version), ISSN 2545-4439 (for printed version).
2. Dimitrovski, R., Pushova, L., Georgiev, M. (2017d). The Balanced Scorecard Model as a tool for strategic management and control. // International Journal of Scientific papers. Institute of Knowledge Management, Skopje, 17, 2017, N 2, pp. 1035-1039, ISSN 1857-923X (for e-version), ISSN 2545-4439 (for printed version).
3. Georgiev, M. (2019). Uses of the balanced scorecard model for enhancement of intangible assets. // International scientific conferences: Business and Economics: Collection of scientific articles, Verlag SWG imex GmbH, Nuremberg, Germany, Conferencii.com, 2019, pp. 78-81, ISBN 978-3-9819288-3-2.
4. Georgiev, M. (2019a). Improvement of the forming of the military professional qualities during the educational process. // 21 st International scientific conference: The teacher of the future, Budva, Montenegro, (07-09.06.2019), Institute of knowledge management – Skopje, Macedonia, 31, 2019, 6, pp. 1945-1950, ISSN 1857-923X (for e-version), ISSN 2545 – 4439 (for printed version).
5. Georgiev, M. (2019b). Modelat balansirana karta za otsenka kato instrument za usavarshenstvane na upravlenieto vav voennoobrazovatelната система. // Godishna mezhdunarodna nauchna konferentsiya na fakultet „Aviatsionen“ 2019, sbornik dokladi 11 – 12 april 2019g., Natsionalen voenen universitet „Vasil Levski“, Fakultet „Aviatsionen“, Dolna Mitropoliya, str. 451-461, ISBN 978-954-713-123-1 (Георгиев, Марин. Моделът балансирана карта за оценка като инструмент за усъвършенстване на управлението във военнообразователната система. // Годишна международна научна конференция на факултет „Авиационен“ 2019, сборник доклади 11 – 12 април 2019г., Национален военен университет „Васил Левски“, Факултет „Авиационен“, Долна Митрополия, стр. 451-461, ISBN 978-954-713-123-1).
6. Hristov, N., Georgiev, M. (2017e). Offset implementation impact on technology transfer in Bulgaria. // International Scientific Journal “Internauka”. Izdatelstvo OOO «Finansovaya Rada Ukrainay», Kiev, № 10 (32), 2017, pp. 110 -113, ISSN 2520-2057 (Hristov, N., Georgiev, M. Offset implementation impact on technology transfer in Bulgaria. // International Scientific Journal “Internauka”. Издательство ООО «Финансовая Рада Украины», Киев, № 10 (32), 2017, pp. 110 -113, ISSN 2520-2057).

7. Hristov, N., Georgiev, M. (2017f). Offset as an economic operation and a trade practice. // International Scientific Journal "Internauka". Izdatel'nyy OOO «Finansovaya Rada Ukrainay», Kiev, № 10 (32), 2017, pp. 114-117, ISSN 2520-2057 Hristov, N., Georgiev, M. Offset as an economic operation and a trade practice. // International Scientific Journal "Internauka". Издатель ООО «Финансовая Рада Украины», Киев, № 10 (32), 2017, pp. 114-117, ISSN 2520-2057.
8. Madanski, V., Georgiev, M. (2017g). The offset as a specific sort of economic activity. // Scientific journal «Economics and finance». Academic publishing house of the Agricultural University, Priority research areas: Collection of scientific articles, 2017, pp. 4-13, ISBN 978-617-7214-53-2.
9. Madanski, V., Georgiev, M. (2017h). Study of the effect of offset implementation on technology transfer in the Republic of Bulgaria. // Scientific journal «Economics and finance». Academic publishing house of the Agricultural University, Priority research areas: Collection of scientific articles, 2017, pp. 43-51, ISBN 978-617-7214-53-2.
10. Nichev, N. (2009). Historical analysis of the involvement of joint armed forces in humanitarian operations. 15th International Conference on Knowledge-Based Organization 26-28 Nov 2009: Military Sciences. Security and Defense, Conference Proceedings 1, Volume: 1, Pages: 104-108, Sibiu, Romania, 2009.
11. Petrov, N., Georgiev, M. (2019c). Assessing of the military professional competencies. // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 462-472, ISBN: 978-605-82433-6-1.
12. Petrova, T., Petrov, Zh. (2020). Alternative Approaches for Long-Term Defence Planning. // Proceedings of INTCESS 2020- 7th International Conference on Education and Social Sciences 20-22 January, 2020 - DUBAI (UAE), International Organization Center of Academic Research, Istanbul, Turkey, 2020, pp. 818-825, ISBN 978-605-82433-8-5.
13. Petrova, T., Petrov, Zh. (2020a). Analysis on the Leading Trends and Capabilities of UAV'S and Their Application in the European Cooperation Projects. // Proceedings of INTCESS 2020- 7th International Conference on Education and Social Sciences 20-22 January, 2020 - DUBAI (UAE)., International Organization Center of Academic Research, Istanbul, Turkey, 2020, pp. 826-833, ISBN 978-605-82433-8-5.
14. Petrova, T., Petrov, Zh. (2020b). Economic Factors in the Development and Application of UAV's and the Fight With Wild Fires. // Proceedings of INTCESS 2020- 7th International Conference on Education and Social Sciences 20-22 January, 2020 - DUBAI (UAE), International Organization Center of Academic Research, Istanbul, Turkey, 2020, pp. 811-817, ISBN 978-605-82433-8-5.
15. Petrova, T., Petrov, Zh. (2020c). Long Term Development Perspectives for UAV Potential. // Proceedings of INTCESS 2020- 7th International Conference on Education and Social Sciences 20-22 January, 2020 - DUBAI (UAE), International Organization Center of Academic Research, Istanbul, Turkey, 2020, pp. 802-810, ISBN 978-605-82433-8-5.
16. Terziev, V., Georgiev, M. (2017b). Highlights of the evolution of the 'Balanced Scorecard' idea as a model for managing strategy development and control. // SOCIOINT 2017- 4th International Conference on Education, Social Sciences and Humanities 10-12 July 2017- Dubai, UAE, OCERINT- International Organization Center of Academic Research, Istanbul, Turkey, 2017, pp. 607-610, ISBN: 978-605-82433-1-6.

17. Terziev, V., Madanski, V., Georgiev, M. (2017). Offset as an economic operation and a trade practice. // Proceedings of ADVED 2017- 3rd International Conference on Advances in Education and Social Sciences 9-11 October 2017- Istanbul, Turkey. International Organization Center of Academic Research, www.ocerint.org, 2017, pp. 748-753, ISBN: 978-605-82433-0-9.
18. Terziev, V., Madanski, V., Georgiev, M. (2017a). Offset implementation impact on technology transfer in Bulgaria. // Proceedings of ADVED 2017- 3rd International Conference on Advances in Education and Social Sciences 9-11 October 2017- Istanbul, Turkey. International Organization Center of Academic Research, www.ocerint.org, 2017, pp. 743-747, ISBN: 978-605-82433-0-9.

