Economic development

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Economic Development

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CONTENTS

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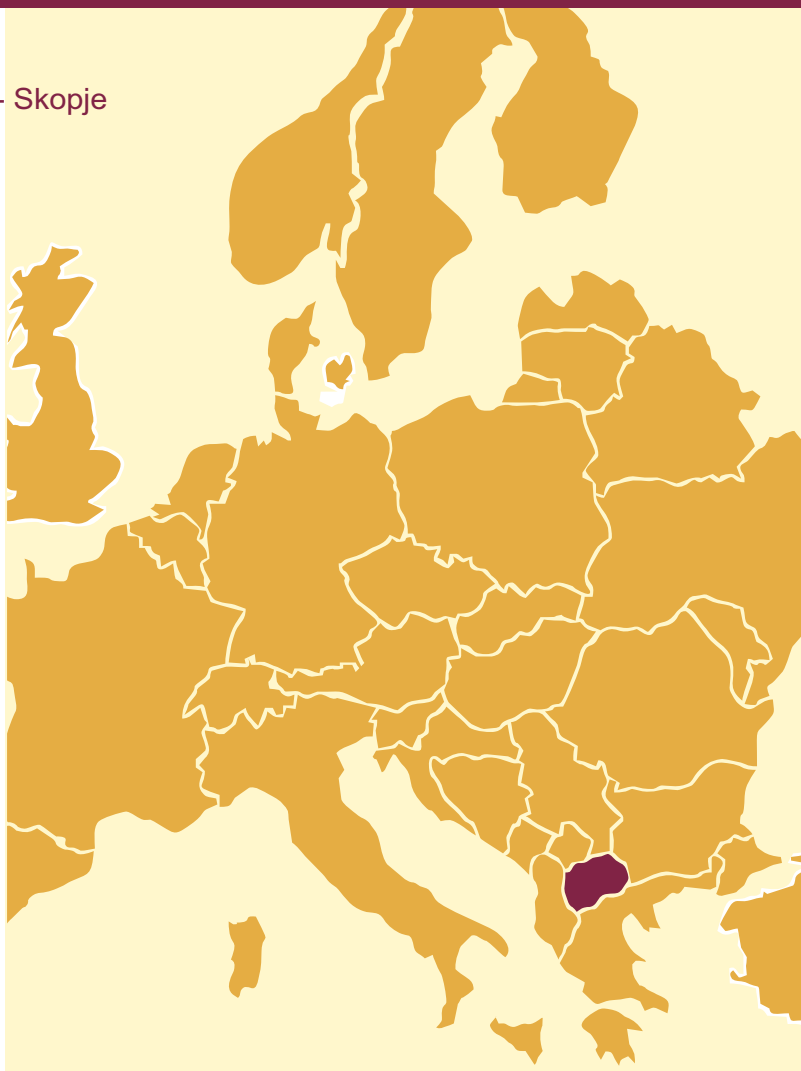
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Skopje, May 2016

prof. Biljana Angelova, PhD
Editor-in-chief

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NEDA PETROSKA-ANGELOVSKA[2]

INVESTMENT EFFICIENCY OF ENTERPRISES IN TOURISM SECTOR IN THE REPUBLIC OF MACEDONIA

Abstract

This article is focused on issues related to the achieved level of investment activity in the Republic of Macedonia and investment efficiency in enterprises of tourism sector in the Republic of Macedonia.

For that purpose investment in fixed assets in tourism enterprises during the period of 2010-2014 is analyzed. The investment activity is mostly observed by the scope of investment in tourism sector enterprises, their share in GDP versus share of depreciation, and in that manner rate of investment is estimated. The objective of further analyses is structure of gross fixed capital formation of tourism sector enterprises by purpose of investment and by type of ownership. Foreign direct investment in tourism sector is also elaborated. For the purpose of this research, investment efficiency in this sector is measured and it shows unfavorable level for above mentioned period. Analyzes are mostly based on statistical method, using official statistic data.

The results of research in this paper show reduced investment activity in tourism sector enterprises due to different factors. Better investment activities and more favorable structure of investment in tourism sector enterprises, prerequisites concrete measures and activities toward improvement of investment clime and stimulation of domestic and foreign investors.

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Key words: investment, tourism sector, gross fixed capital formation, enterprises, Republic of Macedonia.

JEL Classification: G31; Z32

Introduction

Investment means venture of part of the income accumulated from previous production processes of enterprises in new production processes or in the modernization of the existing process. Hence, the investments are considered to be basis driver of other factors of economic development. Without investment it cannot be imagine that activation of other factors of economic development as: free labor force, the available natural resources and transfer of technologies and scientific achievements and knowledge. Investment process and new investment flows are preconditions for sustainable economic growth. Also, investments have multiplicative effect on the growth of income. So, the "increase of the investments, will influence an increase of national income for a larger amount than the initial investment growth[3].

Tourism sector enterprises are quite interesting if analyzed in terms of the amount of the investment. Namely, the amount of investment in tourism enterprises is relative if we take in to account that investment may vary from minimum amounts, or " free " to investments with very high value pertaining to the material base in tourism and infrastructure investments.

The first investment is with very low value and is typical for most of the natural tourist attraction and cultural attractions that have not been built with purpose for the tourist offer (churches, monasteries, authentic architecture, etc.). Those attractions were built much earlier and for other initiative. Such attractions are becoming operational and are part of the tourist offer with very small investment activities, i.e. minimum financial assets.

Complete opposite is investment in material base of tourism enterprises, primarily catering facilities of various senior categories, besides accommodation facilities should contain many other interesting items (theme parks and entertainment facilities and recreation) in their complexes. It is also

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[3] Metodija Nestorovski: "Ekonomija na investiciite", Ekonomski fakultet - Skopje, 2010, p.61.

important to note that to have a good tourism offer, you should possess a good infrastructure in terms of functionality roads, airports, utility infrastructure. This is certainly great investment operations, which require funds, but on the other hand they are operational of not only tourism, but also for other sectors of the economy of a country.

Hence, we cannot give a single estimate of the amount of investment in tourism sector enterprises. The diversity of the enterprises tourist offer, i.e. different level of investment in various segments of the tourism offer, presumably need separate or project approach to estimate the size of the investment costs in tourism enterprises.

1. SCOPE AND STRUCTURE OF INVESTMENT IN FIXED ASSETS IN ENTERPRISES OF TOURISM SECTOR IN THE REPUBLIC OF MACEDONIA

In recent period the Republic of Macedonia has a modest tourism development with a very small investment activity. Lack of investment, especially in renewal of capacities in tourism enterprises is one of the most important reasons for the low standards in tourist services and weak tourist offer in Republic of Macedonia.

The insufficient level of investment in this period is determined by several factors, as: insufficient development the whole national economy and the reduced opportunities for the creation of reserve funds for that purpose; small volume of savings both for enterprises and households; high price of investment loans/ bank long-term credit, that is basically the result of the functioning of the banking system in our country; global economic crises; insufficient interest of foreign investors on long term either through direct investment or other type; the stability of the system in the transitional period and the possibility of the occurrence of several national risks for both domestic and foreign investors, etc.

Developmental issues of Macedonian tourism can be improved with significant amounts of investment, in order to reach fundamental preconditions for an adequate response to contemporary market requirements and repositioning on tourism market. Namely, necessary resources needed for investment in the sector enterprises for modernization and improvement of quality of tourism offer, in order to reach a technical preconditions for a

market repositioning, can be estimated as significant amounts especially due to the relatively low rate of investment in the last period[4].

Gross fixed capital formation in tourism is symbolic in relation to investments in other sectors of the national economy. Investment in tourism sector enterprises is less than 1,5 % of total investments (Table 1). It is evident that in the last few years is not registered even a slight increase in share of investments in tourism sector enterprises. So, in general have observed data indicate very low level investment activity in the sector. This situation is reflected negatively on the economic performances of the sector enterprises and on the quality of tourism services acquired.

The share of investments in tourism sector enterprises in GDP, as evident in table 2, is relatively low, also. The low share of investments in GDP, as well as the low base upon which it is calculated, in the period up to 2014, lead us to the conclusion that in the Republic of Macedonia there is not intense for dynamic development of tourism sector. If we take into consideration the fact that many more developed national economies do not overlook the level of investments and their share in gross domestic product and it is approximately over 20 % per year, for the Republic of Macedonia as a country with a low level of development level, it is certain that there is no development in tourism sector without the participation of investments in GDP around 25 %.

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[4] The highest amount of investment in fixed assets for the whole analyzed period is as follows: Construction over 35%; Mining and quarrying, Manufacturing, Electricity, gas, steam and air conditioning and water supply, sewerage, waste management and remediation activities on the environment (over 22%); wholesale and retail trade, repair of motor vehicles and motorcycles, Transportation and storage (over 13%) .

Table 1: Participation of investment in fixed assets in tourism sector enterprises in total investment

Year	Total invest-ment (in mil-ion denars)	Investment in tourism sector enterprises(in million denars)	Participa-tion(in %)
2010	100851	2026	1,3
2011	109219	867	0,8
2012	109071	1165	1,1
2013	117382	1307	1,1
2014	123115	1325	1,1

Source: State Statistical Office ,Publications of Investment appropriate years (2011-2015)

Table 2: Rate of investment in enterprises of tourism sector the Republic of Macedonia (in %)

Year	Participation of investment in GDP	Participation of depre-ciation in GDP	Rate of investment
2010	16,7	15,1	1,6
2011	19,0	17,9	1,1
2012	22,8	19,5	2,3
2013	20,4	17,9	2,5
2014	18,9	16,5	2,4

Source: State Statistical Office ,Publications of Investment for appropriate years (2011-2015)

Evidently, from the above mentioned data for share of investment in GDP in the tourism sector for the observed period, it can be concluded that there are not positive changes in that context.

With such a very low level of investment expenditure, on one hand, high level of obsolescence of capacities in the tourism sector enterprises and hence the share of the depreciation in GDP, on the other hand, it is obvious that for a long period ago tourism sector in the Republic of Macedonia is on the margins of disinvestment. Namely, the data (Table 2), show very low level of rates of investment indicators in tourism sector in the Republic of Macedonia. In the beginning of the analyzed period, tourism sector enterprises are very close to the phenomenon of disinvestment, or limited investments. The rates of investment vary from 1.1 % to 2.5 % that could not

be assessed as favorable. This kind of investment expenditure enables only simple reproduction that cannot be a basic for stable economic system and healthy and favorable investment climate.

The intensification of the investment activity in last three years of the observed period is a result of the changed attitude to tourism. The construction of new and modernization of existing facilities is necessitated in connection with the development of the technique and technology, and technological progress, as well as for a more successful involvement of enterprises in the market operations. There are indications that Macedonian tourism in the future could pass into a new development phase, so it could be expected better work results.

For the purpose of this paper it is also important to take a look on investment structure[5] the Gross fixed capital formation in tourism sector by type of ownership (Graphic 1) and Gross fixed capital formation in tourism sector by technical composition (Graphic 2).

Graphic 1.Gross fixed capital formation in tourism sector by type of ownership (2014)
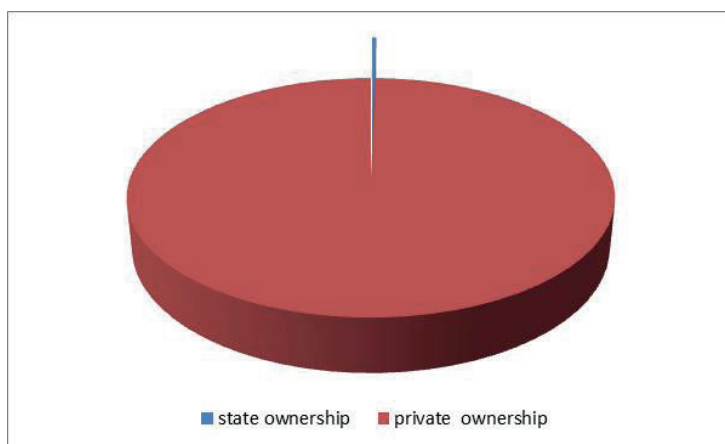
Source: DZS, Statistical Yearbook of the Republic of Macedonia, 2015

Presented data sows very low investment rate (less than 1%) in state owned enterprise. Having in mind the ownership structure of tourism

[5] Brigham D., "Sredno nivo na finansiski menadzment (desetto izdanie)", Ars –lamina (prevodi na Vladata), 2014, p. 538-625.

enterprise, where the private enterprises are majority that stat is very logical. It is evident that private investment is dominant in gross fixed capital formation in tourism sector for the year 2014, but the same structure is characteristic for the years before 2014, also.

Graphic 2. Gross fixed capital formation in tourism sector by technical composition (2014)
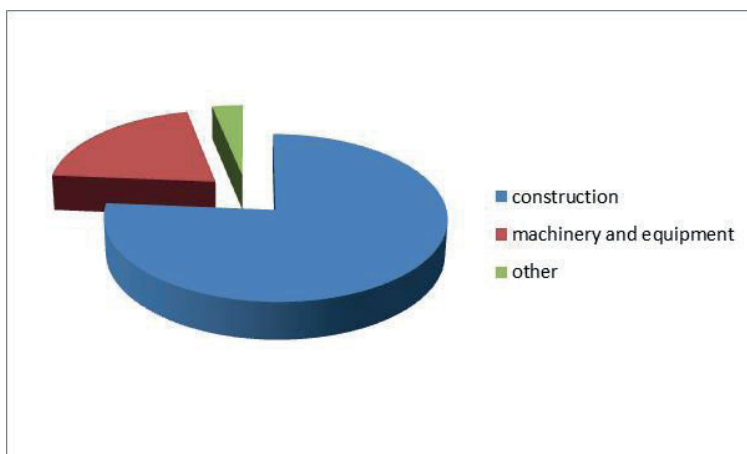
Source: DZS, Statistical Yearbook of the Republic of Macedonia, 2015

What refers to gross fixed capital formation in tourism sector by technical composition, it is evident that investment in construction in tourism sector enterprises is dominant (76,3%) , after that follow machinery and equipment investment with 26,3%, and low level of 15,9 % refers to other types of investment. Having on mind the character of tourism sector, it can be mentioned that the structure is favorable, but it is debatable how much positive influence from that investment reflect on the tourism service better quality.

2. FOREIGN DIRECT INVESTMENT IN TOURISM SECTOR

It can be highlight that the entry of foreign capital in the form of investment in Macedonian tourism is   favorable form for stimulating the development of tourism and improve the efficiency of the tourism

sector. Namely, the foreign direct investment (FDI) is a complex form of international their corporate investments. They always reflect the long-term interests, influence and control by the foreign investor on the operations of the company in the country. FDI always involve series of elements essential for resolving the problems related to technology, organization process, business doing and marketing. It is a prerequisite for establishing of profitable and unanimously international marketing criteria, competitive tourism enterprises, better tourism product, as well as to improve the efficiency of investments.

The total sum of foreign direct investments in the tourism sector in the Republic of Macedonia is relatively modest and corresponded to the total volume of foreign direct investments in the country (Table 3). From the presented data it can be registered a declining tendency, that indicate to the fact that the tourism sector in the country is still not a serious interests of foreign investors. This conclusion is based on the fact that there is not significant amounts of FDI allocated in tourism sector enterprises evident form the modest share of tourism sector FDI in total FDI. Their part in total FDI for the period is around 1%.

Table 3:Foreign direct investment in tourism sector

Year	FDI in tourism sector (in million euro)	Participation of FDI in tourism sector in total tourism investment (%)	Participation of investment in tourism sector in total FDI (%)
2010	55,9	0,04	1,7
2011	54,9	0,10	1,5
2012	41,5	0,06	1,1
2013	35,4	0,04	0,9
2014	32,8	0,04	0,8

Source: NBRM, Annual report for appropriate years (2011-2015)

Mostly, FDI in macedonian tourism sector is a matter for the ownership transfer, and   less   investment are directed to creation of new and modernization of existing base in the tourism sector . Small amount of tourism investment and especially FDI are not contributing to significant improvement of tourism offer as well as for the modest revitalization and modernization of tourism sector.

3. ANALYSIS OF THE INVESTMENT EFFICIENCY IN ENTERPRISES OF TOURISM SECTOR

Efficiency of investment can be estimated in two main ways. First one is when it is taken in to consideration the output of total production factors (K) of the GDP(P) , expressed as an average capital output (K / P), or average capital ratio (k) , i.e. reciprocally (P / K), that is product ratio. Second way is as output of additional investment of increase GDP and is expressed as the marginal capital coefficient, ($\Delta P / \Delta K$) where $\Delta K = I$, i.e. investment is equal to increase of production factors .

In first case new investment is reviewed as part of the all production factors, their influence is seen in the change of efficiency of the total production funds. The new investments are cumulated and increase the production funds .In spite of, average coefficient that is result of all factors, the marginal coefficient is considered as a result of certain factor in the specific case of new investments. That is not quite true, because in real economy cannot be excluded the influence of other factors. .

When it is taken in to consideration the analysis of investment efficiency, priority is given to the simultaneous marginal coefficient. This attitude is substantiating with a fact that investment should be continuous process, such as growth of gross domestic product in specific year is a result of investment in previous one. Thus, the calculations of the coefficient are simplified. Therefore, when analyzing investment efficiency in tourism sector enterprise in the Republic of Macedonia in this article, the method of simultaneous marginal coefficient is used.

From the received results for investment efficiency of investment it can be concluded that the efficiency of the realized investment in fixed assets in the Republic of Macedonia is very low (Table 4) . This conclusion is substantiating with low rates of real growth in the gross domestic product. It is undoubtedly very important limiting factor in achieving the primary objective of the investment, accelerating the economic development.

Table 4: Investment efficiency in the Republic of Macedonia

Year	Whole economy	Tourism sector
2010	0,71	1,29
2011	-0,07	-1,58
2012	0,25	0,56
2013	0,23	0,63
2014	0,24	0,74

Source: Own calculations based on State Statistical Office, Publications of Investment for appropriate years (2011-2015)

The efficiency of the investments in tourism sector enterprises is higher than the coefficients characteristic for total economy, due to the fact that per unit of investment in tourism sector higher value added is created. That confirms the important role of tourism in generating of income.

The values of the efficiency ratio in tourism sector enterprises until 2010 tend to increase[6]. the increased efficiency of investments in tourist sector in the period before, partially is due to better performances of invested funds by private sector and greater efficiency of the private capital

The year 2011 is characteristic because of the drastic decline in the efficiency of investment. The main reason is economic crises that had a significant influence on the whole real economy, as on tourism sector enterprises too. Tourism sector is very sensible, because of its specific characteristics that reflected on the volume of operations in the tourism sector.

In next few years there is evident gradual increase of investment efficiency in the sector that is in relation with the gradual recovery of whole economy.

Surely, the results might be more favorable and capital ratios better, if seasonal operations in the Macedonian tourist sector are not too much emphasized. Capacity utilization is significantly lower, when seasonal operations are expressed. In addition, in the tourist offer has a lot of disadvantages that have a great impact on potential results. Also, weakness related to insufficient economic propaganda, level of human capital organization and engagement, ability of the management, relatively unfavorable system solutions, insufficient reductions in operations, etc.

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[6] Ackovska M: "Turizmot I ekonomskiot razvoj vo Republika Makedonija", Ekonomski institut, 2009.

Conclusion

Presented data in this paper, as well as a current level of economic development of the Republic of Macedonia indicate need for improvement of investment clime in the country and accomplishment of greater scope of investment and their allocation in those sectors of the economy which will generate higher rates of growth, as tourism sector is. That means improvement of investment structure and allocation of investment in real sector of economy, through stimulation of private domestic investors' as much as foreign investors. Direction of investment in private sector doesn't mean submission of positive influence on Macedonian economy, so very important question is investment efficiency at the same time.

Having on mind that seasonal operations in the macedonian tourist sector are too much emphasized, it cannot be expected more favorable results, because of the very low capacity utilization. In addition, macedonian tourist offer has a lot of disadvantages and weaknesses that have a great impact on potential results.

With activities related to undertaking measures as: government support for improvement of investment clime for domestic investors as much as for foreign investors, making attractive investment opportunities in tourism sector, on the long run there should be expectations for larger scope of investment in the sector enterprises. Furthermore, investors are permanently doing efforts to choose the best investment alternative, so improvement in investment structure from different aspects is anticipatory, also. That should lead to higher rate of investment efficiency in macedonian economy, with more expressive multiplicative influence on growth of income.

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TATJANA PETKOVSKA MIRCHEVSKA[2]

THE STRATEGIC IMPORTANCE OF THE BUSINESS ENVIRONMENT FOR DEVELOPMENT OF E-BUSINESS IN THE REPUBLIC OF MACEDONIA

Abstract

The rapid and intense changes in the environment, especially the technological ones, have a major impact on the transformation of many companies and the adoption of e-business. The changing and unstable environment inflicts upon companies a need for constant adaptation and accepting the strategic approach to entering the e-market.

This paper, from a theoretical and empirical perspective, elaborates on the importance of the e-environment for the development of e-business in the Republic of Macedonia. Hence, it identifies the knowledge of the companies in regards to the conditions and opportunities in an e-environment, namely, their knowledge of the immediate and broader environment for development of e-business. Research shows that companies in the Republic of Macedonia have partial knowledge in relation to the conditions and opportunities for conducting e-business in the country, which is why their connection to the successful implementation of e-business models in business activities is outlined in the final conclusions.

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Keywords: e-business, e-commerce, strategic analysis, Internet, business environment.

JEL classification: L0, O3, M0

Introduction

Companies are open systems that are directly affected by many factors from the environment. In order to formulate an appropriate strategy for entering the market, an analysis needs to be made of the company's environment. In fact, the dynamic market conditions impose the need for performing research and planning, with the purpose of developing a successful e-business concept.

The rapid development of information technology and its broader application in businesses is resulting in quicker changes taking place within the business environment, which creates the need of developing long-term strategies of companies. However, in addition to the need for analyses of the environment and building appropriate e-business strategies, government policies are neccessary that will create an appropriate e-envoronment and will encourage businesses to access the electronic market and take advantage of the benefits of e-business. The political and legal framework are one of the most significant promoting factors for the development of electronic business. A good legal regulation creates a reliable base for accepting the electronic way of working by businesses. Following the impact of the factors from the macro environment, as well as the factors from the immediate, more specifically, the micro environment, the strategic approach should enable the company to identify the market opportunities and threats, as well as to anticipate the changes in the complex and dynamic environment.

The new business environment provides great opportunities for both large and small companies. Even though small bussinesses have quite limited material and human resources at their disposal, by adopting the strategic approach in the running of their business, they can make use of the opportunities that arise from that environment. With strategic thinking on electronic business, companies will be able to choose real technological solutions that will support their busiiness strategies and will create value for the company and its consumers.

This paper firstly identifies the factors of the business environment and their influence on the development of e-business. Following this is an analysis of the data obtained from field research on the impact of the business environment on the development of e-business in Republic of Macedonia. In the end, from the perspective of improving the business environment, potential directions are given for a more intense development of e-business in the country.

1. TYPES OF FACTORS AND THEIR INFLUENCE IN THE BUSINESS ENVIRONMENT

It is without a doubt that technological changes create a number of economic, social and cultural adjustments, which enable radical changes in the manner in which the information environment is created. Social, technological and economic factors create a complex and competitive business environment, they initiate business pressure on companies and also impose upon them the need for their adaptation to the environment. The pressure from the business environment can be classified into three categories, as follows:[3]

- *Economic pressure* influences the business activities of the companies and is initiated by fierce competition, the global economy, regional trade agreements, the nature of the workforce, as well as the increasing power of consumers.

- *Social pressure* stems from legal-political issues, government regulations, ethical problems, as well as from increased social responsibility of certain companies, which has its own impact upon others.

- *Technological changes* and their rapid spreading are reflected on the activities of the companies. The Internet along with new technologies have led to restructuring of the market at the local and global level as well. This causes pressure for redefining the way business is done and represents a challenge to the traditional economic thinking. The pressure for change is visible in the production, marketing, within the organizational structure, working methods, sales methods and etc. Technology is becoming more accessible and easier to use,

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[3] Turban E., Ephraim M., Wetherbe J.: "Information technology for management-transforming organization in the digital economy", John Wiley & Sons Inc., 2004., pp. 11-16.

and represents an important precondition for the development of e-commerce among small and medium-sized companies.

Legal regulations and systems for protection and security are also a significant basis that can initiate or limit e-business in general. Therefore, numerous legal solutions for the promotion of an information society and the development of electronic business are being adopted at the global and regional level.

The development of electronic commerce is not followed accordingly with a development of the legal infrastructure. First, new technologies and services are introduced, and then legislation is passed. The lack of applicable legal regulations, customs and tax insecurity, confidentiality and privacy issues, problems with e-money, the role of the government, fraud and etc., are becoming part of the problems, which at the global level reflect the successful implementation of e-business.[4]

2. RESEARCH AND ANALYSIS OF THE BUSINESS ENVIRONMENT

In order for companies to be able to position themselves successfully on the market, they need to constantly monitor the changes that are occurring in the competitive environment and bring them in line with their internal resources and capacities. Hence, the need for an analysis of the external and internal environmental factors.

Macro analysis is an analysis of the factors of the general environment, or external environment. This includes factors that have a potential impact on the functioning of the companies, and which can and have the capacity to change the industry in which the company operates and/or to create new industries. Technological, economic, legal-political and socio-cultural factors belong to the general environment or macro environment.

The Pest analysis (Political, Economic, Social, Technological) is an analysis of the political-legal, economic, social and technological factors of the environment and is the foundation for strategic planning. This analysis will help companies predict the impact of the factors of the wider environment on the functioning of their business more easily.

[4] Vaskovic, V., Lutovac, M., "Electronic business", State University, Novi Pazar, 2009, pages. 47-48.

The analysis of the political – legal factors includes the following:

- The general political climate,

- Taxation and its impact on consumers, market demand and business profitability,

- Government policy on public consumption, as it directly affects the demand in the economy,

- National policy to support e-commerce and for development of e-government,

- Regional and Monetary policy,

- National legislation, especially in working with the Internet and Internet technologies,

- Legal provisions for international trade and etc.

The analysis of the economic factors of the environment includes the following:

- Economic development,

- Interest rates,

- Characteristics of consumers (their purchasing power and etc.)

- Unemployment rate can impact the market demand,

- Inflation level and etc.

Although the company can not have an influence on the economic factors, the analysis can help companies respond more adequately to the occurring changes that are of economic nature and adapt in a timely manner, so as not to bring into question the survival of the company.

The analysis of the social factors of the environment also includes the demographic and cultural factors, such as:

- Population growth,

- Aging of the population, quite a significant factor in doing e-business, (the younger population is more present on the Internet and represents the category of potential consumers),

- Education structure, a lot of data indicate that the highly educated consumers seem to be the ones who are embracing electronic commerce and new technologies much more,

- Social and cultural changes (the views of the population in regards to new models of operation, their lifestyle and psychology, Internet presence and others),

- The rural as opposed to the urban population, and its migration as a potential opportunity for increasing the demand and etc.

The analysis of the technological factors is one of the more important ones when developing an e-business strategy, and includes the following:

- The rate of accepting new technologies, both by competitors and by consumers,
- Opportunities for promoting business activities with the use of new technologies,
- The emergence of new markets and models of operation as a result of new technologies,
- Costs for research and introducing the technology,
- Scientific and technological innovations in the industry,
- The evolution of technology and etc.

Technological factors, currently, are very significant for businesses, because they create both opportunities and constraints.

The analysis of the micro environment includes the immediate environment of the industry and the internal factors of the company, which are important for its competitive advantage.

In literature, Porter's five competitive forces analysis model is the best-known and most common example of analysis of the immediate industry environment, and includes the following:[5]: rivalry between existing competitors in the market, bargaining power of buyers, bargaining power of suppliers, threat of new entry, threat of substitution.

The analysis of the internal factors includes: resources, capacities and basic competencies of the company. The internal analysis will provide data on the effectiveness of the existing strategy, and on the efficiency of utilizing the company's resources. Through this analysis the company can:[6]

- Identify which resources and essential skills it can utilise,
- Assess the effectiveness of the company in the chain of adding value,
- Assess the performance of products and services and
- Assess the performance of the functional areas of the business.

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[5] Porter M.E., „On competition", DataPons, Macedonia, 2009, page .3-4
[6] Combe, C.: "Introduction to E-business", Management and strategy, first edition, Elsevier Ltd., Oxford, UK, 2006, p. 216.

The resources of a company can be classified into the following four categories: human, operational, organizational and financial resources.

The SWOT analysis is part of the process of strategic management which identifies the strengths and weaknesses of a company, as well as the opportunities and threats of the external environment. The results of a SWOT analysis are helpful in the phase of formulating the company strategy.

According to Chaffey[7], an analysis of the competitive surrounding, that is, competitive environment, is especially important for an e-strategic analysis, whereby, special emphasis is given to the analysis of the demand and competitive threats. A key factor for e-business strategic goals is the current level and future projections on the consumer use of e-business services, which is part of the demand analysis.

The analysis of the competitive environment for e-commerce companies provides information on e-business services offered by existing and/or new competitors on the market and their acceptance by consumers. When performing this analysis, the existing competitors need to be identified, their manner and operating techniques, new companies that are starting to work online must be reviewed, new technology needs to be monitored and implemented, ways of supporting customers and so on.

Once the strategic analysis is completed, a strategy is formulated based on the results (opportunities and threats), more specifically, alternatives of the analysis, and in accordance with the established objectives, mission and vision of the company.

However, in developing an e-strategy, several important characteristics of the electronic market need to be taken into consideration, such as: that certain transactions are virtual, markets are unstable, markets are growing fast and there are frequent changes, companies are interconnected, and there is great uncertainty on the markets and etc.[8]

The development of the strategy depends greatly on understanding the environment in which the business activities and transactions of the company are being conducted. Factors associated with consumer needs, with the way services are provided, with competition, dealers and suppliers, are the ones that have the greatest influence on the strategy. Local and international economic conditions and regulations and the social setting have a wider impact. Finally,

[7] Chaffey, D.: "E-business and E-commerce Management: Strategy, Implementation and Practice", second edition, Prentice Hall, England, 2004pp. 204-209.
[8] Chen, S.: Strategic Management of e-Business", Second edition, John Wiley & Sons, ltd, 2005. p.213.

technological innovations are of vital importance for achieving competitive advantage and creating the market.[9]

3. E-BUSINESS ENVIRONMENT – CONDITIONS FOR CONDUCTING ELECTRONIC BUSINESS IN REPUBLIC OF MACEDONIA

The business environment for conducting e-business in Republic of Macedonia incorporates several areas that need to be taken into account. These areas include the following: the citizens and their acceptance of information and communication technologies, the companies and their policies concerning the development of e-commerce and e-business, an appropriate infrastructure, legal regulations related to electronic business and government policies, namely, the development of e-government, e-banking and others.

Today, e-commerce ranks high among government policies and businesses around the world. In the past several years in Republic of Macedonia, development is noted in the electronic environment, with government policies playing a significant role. Many e-commerce initiatives from the public and private sector help create a more suitable e-environment and contribute to the development of an e-market in Republic of Macedonia.

Republic of Macedonia, through the concept for development of e-government, contributes to the development of an e-environment and to promotion of electronic commerce and electronic business. The adoption or amendment of numerous laws, the implementation of certain policies, formulation of strategies and programs directed towards development of an information society, help improve the business climate in the country.

Data from the State Statistical Office[10] of the Republic of Macedonia indicates that almost all of the companies in the country have Internet access. Specifically in 2015, almost 94% of enterprises with ten or more employees had Internet access, which represents a slight increase compared to that of 2013 (91.5%) and 2014 (93.1%). Around 52% of enterprises had a website or homepage, of which, 79% had provided a description of their products/services and price lists on their website, 40.2% had provided links/references to their social media profiles, and 16.4% had provided online ordering and

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[9] Vaskovic, V., Lutovac, M., "op.cit", 2009, page. 42.
[10] According to Publications of the State Statistical Office of the Republic of Macedonia on Usage of information and communication technologies in enterprises in 2013,2014 and 2015.

reserving. In addition, statistical data confirm that electronic commerce in Republic of Macedonia is still not sufficiently developed. Only 7.7% of enterprises with 10 or more employees conducted e-commerce in 2014, in particular, 3.6% of enterprises conducted e-sales and 5.9% e-purchases.

The growth of electronic commerce is still not significant enough, given the fact that almost all of the companies in the country use the Internet. E-commerce is highest among companies that have more than 250 employees, of which 13.4% had e-sales (receiving orders via computer networks) in 2014 and almost 16% had e-purchases (sent purchase orders via computer networks). Regarding small companies with 10 to 49 employees, 2.9% of them have e-commerce, and 5.4% have e-purchases, which slightly differs from that of the medium-sized companies with 50 to 249 employees. This review excludes micro companies with 1-9 employees from its observation, because there is no data on their electronic commerce (Figure 1).

Figure 1. E-commerce of enterprises in 2014 by number of employees
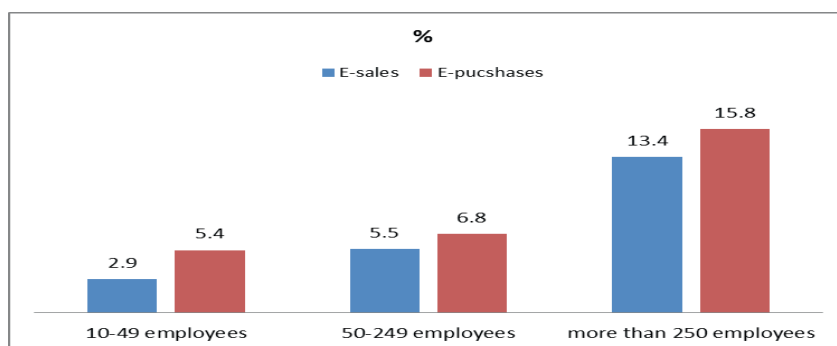
Source: according to data of the State Statistical Office of the Republic of Macedonia from 2014

In the Republic of Macedonia[11], in the first quarter of 2015, approximatly 69.4% of households had Internet access at home, which is just one percentage point more than that of the previous year.

These data indicate that the number of potential online consumers, which companies in Republic of Macedonia need to consider when developing their strategies, is quite high. Students and pupils are the largest number of Internet users in the country (94%), followed by the population aged from 25 to 54 years with 84%, which is also a high percentage, while users aged 55 to 74 account for 37%.

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[11] According to Publications of the State Statistical Office of the Republic of Macedonia on Usage of information and communication technologies in households and by individuals 30.10.2015, Number: 8.1.15.31

Therefore, it can be concluded that all categories of citizens are present on the Internet market, and according to the activities and objectives of the companies, they could be targeted and found on the Internet. What needs to be noted is that the electronic purchases of the citizens of Republic of Macedonia are still very small, but that each year there is a slight increase in their online purchases.

The concept for the development of e-government generates many benefits in society, for the citizens, the business sector and also for the public sector.

The start of the development of information society in Republic of Macedonia dates back to 2001, when the Law on data in electronic form and electronic signature was adopted. Moreover, in 2002, a Declaration of the Assembly of the Republic of Macedonia was adopted for further development of the Information Society, and for this purpose a Commission for information technologies was also established. As of 2008, the Ministry of Information Society and Administration has been the most important institution responsible for coordinating activities for development of the Information Society. The Ministry, in 2011 and 2013, was in charge of the project for development of electronic commerce by opening around 100 new online shops through a selection of the 100 best e-business plans.[12] In the context of projects that contribute to a more favorable business climate, the liberalization process for registeration of domain names from the beginning of 2014 also needs to be mentioned, in which many enterprises are included, which have signed agreements with the Macedonian academic research network.[13]

The 20 most important services of e-government, determined by the European Commission[14], are used to assess the progress of the country by the European Union, in terms of the e-government concept. Eight of these services concern businesses (social benefits, corporate tax, VAT, registration of a new company, submitting data to State Statistical Office, costums declarations, environmental related permits and public procurements) and the others concern citizens.

With the purpose of having a more complete picture on the importance of the business environment for the development of e-business in Republic of Macedonia, a survey was conducted in 182 companies from Republic of

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[12] More information can be found at http://www.mio.gov.mk/?q=node/2807. Accessed on 10.04.2014.

[13] .Available at http://www.mio.gov.mk/?q=node/3645. Accessed on 14.09.2014.

[14] Capgemini, IDC, Rand Europe, Sogeti & DT: "Digitizing Public Services in Europe: Putting ambition into action. 9[th]Benchmark Measurement", Brussels: European Commission, Directorate General for Information Society and Media, 2010a

Macedonia in regards to strategic thinking, awareness of e-business, impact of e-business applications, Internet presence and social media benefits. From the data analyzed on the strategic approach of companies, it can be noted that they do possess certain elements of an e-strategic approach in their business operations in the country, but, that there is a lack of a complete approach to the immediate and more broader external and internal e-business environment.

About two thirds of companies consider that e-business aplications, activities and models can improve their operations, however, 26% of surveyed companies do not know whether these aplications, activities and models can actually contribute to their more successful operation.

They have already understood and accepted the social media boom into their strategic thinking, and as result, 80% of companies believe that their presence on social media, such as facebook, twitter, linkedin and others, can contribute to a greater promotion of the products and services that they offer.

Research has shown that companies are not very familiar with their immediate business environment, that is, with the e-activities of their competitors and suppliers. More than half of the companies (56%) are not aware of their competitors' e-business activities, and around 40% of the surveyed companies do not have information about their suppliers' presence on the Internet (table 1).

Table 1. Strategic approach to e-business in Republic of Macedonia

E-business strategic thinking	Yes %	No %	Don't know %
Elements of e-business in vision and mission	51.6	48.4	
Do e-business applications, activities and models improve your operations	68.7	5.5	25.8
Familiar with e-business activities of competitors	44	56	
Familiar with web presence of suppliers	59.9	15.9	24.2
Social media benefits	80.2	6	13.7

Source: own research

Of the total companies surveyed, around 41% use some e-business applications and models, in particular, 8% have fully implemented e-buciness applications and models in their work, and 32% have partially implemented them. There are also companies that are currently implementing e-business

solutions (9%).

Enterprises (46%) find issues concerning privacy and security as one of the most significant barriers in doing e-business (e-commerce), which is expected when starting a new business or when new applying new business sollutions to current operations. However, if there is greater knowledge in terms of the legal regulations for conducting e-business (e-commerce) and bank policies on using e-commerce services, then concerns over policy and security issues, as a barrier to conducting business, will no longer be among the most important barriers. Insufficient information on starting up or implementing an e-business was stated by enterprises as an almost equally significant barrier. Almost half of the surveyed enterprises (43.4%) do not have information on how to start a business (Table 3).

Figure 2 shows a graphical presentation of the barriers to doing e-business in the country.

Figure 2. Barriers to conducting e-business
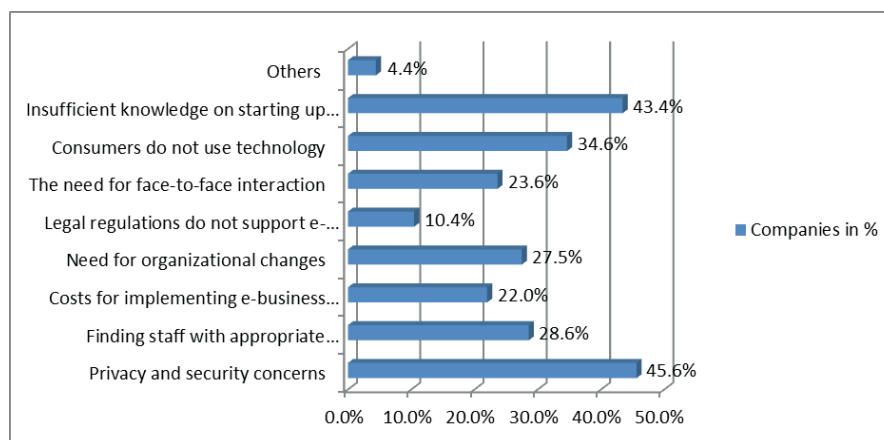
Source: own research

Despite the extensive legislation that regulates the e-business area, around 67% of the surveyed companies are not familiar with it. In fact, micro (64%) and small (75%) companies have the littlest knowledge in terms of e-business (e-commerce) related legal regulations.

Conclusion

With everyday technological innovations, the operating conditions of companies are becoming more uncertain and dynamic. Therefore, the need for strategic planning is imposed as an imperative, that is, the strategic access to the e-business environment, if companies want to survive and to develop on the newly created markets.

Social, technological and economic factors create a complex and competitive business environment. These factors initiate business pressure on companies and impose the need for adapting to the environment. The fast and profound changes in the environment, and especially the technological changes, have an enormous influence on the transformation of many companies, which takes place in the process of working, learning new technologies, their adoption, changing the organizational culture, new methods of cooperation, etc. The new competitive environment imposes upon companies the need for construction and adoption of new effective models, all with the purpose of benefiting from the same.

The analysis of the external and internal factors in an e-environment has the key role in monitoring changes. Hence, the formulation of an e-business strategy will be based on the results of the analysis, followed by its implementation which requires knowledge, an appropriate structure, culture and company leadership.

In Republic of Macedonia there are e-business related legal regulations, more specifically, laws that directly or indirectly regulate certain areas of the information society, namely the electronic business and electronic commerce. These laws are an important element for providing a safe and secure e-business environment of the companies. There are also strategies focused on development of e-government services, which are a basis for a faster development and adoption of electronic business and electronic commerce, both by companies and consumers.

The results of the survey confirm that companies in Republic of Macedonia are not sufficiently enough familiar with the conditions and opportunities for conducting e-business (e-commerce) in the country. These companies are least informed on the legal regulations in regards to e-business (e-commerce). On the other hand, a significant high percentage (68%) of enterprises in the country are not familiar with the initiatives of the Ministry of Information Society and Administration of Republic of Macedonia for development of e-commerce (e-business).

In order to speed up the process of introducing e-business in the country, direct measures need to be undertaken for eliminating the existing barriers to conducting e-business (for improving the e-business climate). Macedonian companies have certain elements of a strategic approach in conducting their businesses in terms of the e-environment in the country, but, there is lack of a complete approach to the immediate and broader external and internal e-environment.

Greater recognition of e-environment factors and possesing appropriate inner elements and resources lead to strategic decisions on e-bussines, i.e., will lead to a greater implementation of e-business aplications and models in Macedonian companies. Hence, the need to follow a strategic approach to an e-business, or, e-environment, especially for micro and small companies to be able to achieve greater implementation of e-business solutions.

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THE PRODUCT DESIGN AS A SIGNIFICANT ELEMENT OF DIFFERENTIATION FOR ACHIEVING MARKET COMPETITIVENESS

Abstract

In today's economic conditions, each company is interested to gain and sustain a competitive advantage on the market. This paper refers principally to the design of the product according to the consumers' preferences and therefore, its influence to the purchasing process. The majority of the companies in Republic of Macedonia haven't paid attention to the issue of creating a design that will lead to building a strong brand and corporate image recognizable by the consumers.

The purpose of this paper is to highlight the need and necessity of good design that will help the companies to build long-term competitive advantage that will provide them superior performances. The influence of the design to the buying process will be researched with comparison of several products of the wine producers in Republic of Macedonia which have equal quality and prices. In fact, the research is concentrated on the key parameters of the design that affect the decision to purchase. The results analysis confirms the hypothesis and points out the great significance of the design for achieving company's competitive advantage.

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JEL Classification: M10, M30

Introduction

The increase of the competition as a result of creation of unique market at level of the European Union includes new approach by the companies for successful appearance on that market. This approach is in the interest of the customers who receive abundant offer under best conditions with unique goal to be created competitive advantage. The question is how can be achieved competitive advantage? One of the methods that gives us such possibility is the differentiation which is achieved through innovative design of the products that enables the differentiation from the other similar competing products. It's easier said than done, because in practice it is not easy and must be done on the basis of more detailed researches and with the help of experts.

Besides the effects of the globalization not every product can be successful on all the markets because the consumers have different needs that need to be understood. The design, the innovation and the openness to new ideas can help the companies to survive these changes and to identify the new business opportunities in the markets.

The marketing, the research of the consumers and the branding are the key factors in providing assistance to the companies to build relationships with their consumers. If based on solid data of the consumers the quality, the flexibility, the design and the branding can help in increasing the sales and creating consumers' confidence (Baines and Langfield-Smith, 2003).

It should be mentioned that most of the companies in Macedonia believe that they can compete on both the domestic and the foreign market only on basis of lower prices. However we should point at the fact that to rely only on the price is very risky strategy, especially if we take into consideration that the competition is everywhere, and there is also competition from emerging markets such as China, where the production costs are extremely low. Because of this fact it is time the companies in Republic of Macedonia to put special emphasis on the design that will allow them to create competitive

advantage on the domestic as well as on the foreign market. In order the success of the Macedonian companies to be infallible it would be good to combine the shining design with the extremely low prices. We should know that the lowering of the prices is not the key to a success, but the design can be very helpful for maintaining the position on the market. In fact the design is a new approach on the market. Worldwide the companies such as Apple and Sony show what kind of success can be achieved by the companies who concentrated on the design and the innovations. Also on the Macedonian market there are companies who accept these idea and use innovative design, but still it is bigger the number of Macedonian companies who haven't done that yet, whether due to financial resources or some other reason. It is time to approach to good design. The marketing, the public relations and the lowering of the price can help in short terms, but we should know that the investment into the design is what is really necessary in future. Without this the domestic companies would risk losing the marketing fight with the sophisticated foreign brands and will fall behind with the innovations. The design can be helpful so that the companies can respond to the needs of the consumers, and not only to react to the competition.

1. COMPETITIVE ADVANTAGE

The competitive advantage is the basis for success of any company on the competitive market. Many companies with decades are in dynamic race with the domestic and the global competition. The goal of this research is to analyze one of the key methods for building and maintaining a competitive advantage, or creating a product design that will meet the consumers' needs and preferences. The competitive advantage is the ability of the company to make their offer more attractive than the competition in the eyes of the consumers. As defined by Michael Porter (1985), the competitive advantage is the ability of the company to create superiority over the competitors. "The company has competitive advantage if managed its profitability to be higher than the average profitability of the company during certain time period." In fact the company can create competitive advantage with differentiating its offer of products which provides superior value for the customers or reducing of the costs at minimum.

In the era of globalization every company realizes the competitive advantage if it is ready for radical changes and application of innovative design to its products, that will enable to create competitive advantage and at the same time will maintain that competitive advantage. We can compare the sources of the competitive advantage to the foundations of a house. As we can say that the house is safe only if its foundation has quality we can also say that the competitive advantage can be maintained only if their sources are stable, unique and difficult to imitate.

2. PRODUCT DESIGN

The product design is an element of differentiation regarding the products of the competition, therefore is important source for gaining and maintaining of the competitive advantage of the companies on the market (Gouws and Van Oudtshoorn, 2011). Unfortunately the companies include the product design too late and therefore its potential and significance remain neglected. The question is: what is a good design and which precondition should be fulfilled? In order to say that the design is good should be fulfilled the following preconditions (Hsu, 2006):

- Usability of the product – which is a good practical design where the consumer or the user doesn't have to know, to understand or to worry how the product works;
- Ergonomic adjustments – where the product design must be adjusted to the physical and psychological needs of the people. The good design should offer easy usage, comfort, hygiene and safety;
- Economic adaptation – where the product must be available for the consumers in economic sense;
- Aesthetic sensibility – where the product design should affect the consumers preferences;
- Brand consistency – when the layout of the design should be synergy with the entire design of the company. The consumers usually prefer products where it is highlighted the name of the companies.

The dimensions of the good design shouldn't be seen as mutually independent. On the contrary the good design is a certain form of compromise between the conflict demands which arise from different dimensions. Any product that has outdated and unattractive design is very sensitive to the attacks

of the competition. Any company that has a product which is unattractive for the consumers is a serious problem for the company (Veryzer and Mozota, 2005). One of the ways to solve this problem is establishment of commission to monitor the products and their design, which should include experts from the marketing department, the production, the supply, the sale and the control, the management of human resources and the department for research and development. When we evaluate the product and the design we should make periodic testing of the product lines in order to identify those products that don't give satisfactory results regarding the sale, the profit, the competition and the demand in general. With this are identified the weaknesses of the product and the reasons for that. If the reason for the weaknesses is in the design should be approached to changes in the packing and additional promotional activities.

Certain countries are known as leaders in the area of design. For example world-wide famous are the Italian designers of clothes and shoes, the Scandinavian designers are known for the functionality, the aesthetics and the environmental awareness etc. The question is whether is payable to invest in design? The research and the practice suggest that it pays to invest in design because many worldwide famous companies as a result of the funds invested in the design have achieved great competitive advantage. As the competition increases the design offers the best ways of differentiation and positioning of the company products.

3. RESEARCH

According to the problem and the purposes of the research, the general hypothesis has been created: The design as one of the key components for differentiation on the market and creation of competitive advantage.

On the basis of this general hypothesis the respective hypothesis are determined:

- The innovative design can build a long-term maintenance of the competitive advantage
- The brand is important tool for competitiveness, while the innovations and the innovation processes are one of the most important aspects for the development of the competitiveness.

The research is conducted by using the questionnaire on the sample of wine consumers recognizing the influence of the design in the purchasing process. In this paper the main research is about the influence of the design to the customers as well as other factors which influences the purchasing decision process. It is determined with a comparison of several products – Macedonian wines that have equal quality and prices. In this research the key parameters are identified by the design that influences the decision to purchase. The results are obtained on a sample of 400 respondents using the method of stratified sampling. The questionnaire was distributed in shopping centers in Republic of Macedonia on three locations: Skopje, Bitola and Ohrid. The sample of examinees was created according to the goal of receiving relevant information from different categories of wine consumers. The research includes customers of different sex, age and education. In the sample are included 200 examinees from Skopje, 100 from Bitola, and 100 from Ohrid, from which 200 are woman and 200 are man. Half of the examinees are with high education and about equal number of examinees in each of the four age categories (20-30 years, 30-40 years, 40-50 years and 50-60 years).

The questions in the questionnaire are defined in order to gain information and opinion from the respondents about the quality of the wine, their preference for the wine brand and the design of the wine packing. The research was conducted in January 2015. The questionnaire is structured in three parts with total number of 20 questions. The first part contains questions referring to the demographic characteristics of the respondents. The second part consists of questions that are intended to reveal the influence of the design to the purchasing process. The third part contains questions through which are revealed the key parameters of the design that have major influence to the decision for purchasing.

4. RESULT ANALYSIS

According to the research results, the hypothesis has been proven. The questions refer exclusively to the situation in Republic of Macedonia. Therefore, the results of the questions crucial for carrying out the conclusions of the research are presented.

About the question: *Do you buy wine?*, the following answers were received: great percentage of the Macedonian consumers or 83% buy wine,

only 17% of the respondents don't buy this kind of products, but it is not excluded the possibility that they prepare it at home. These results are presented in the chart 1.

Chart 1: Costumers buying wine in Republic of Macedonia
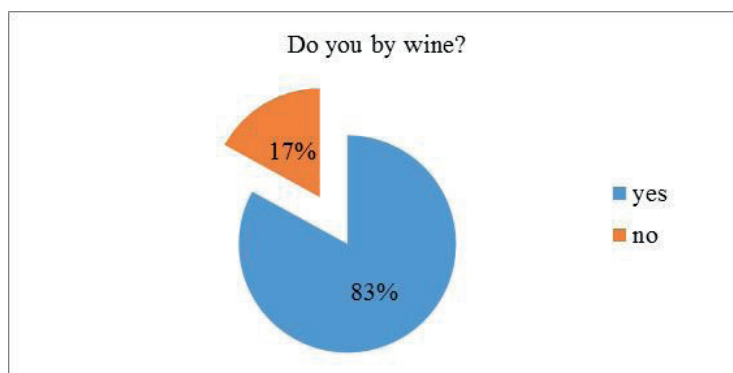
Source: Authors' research

Regarding the question: *How often do you buy wine?,* 52% of the respondents answered that they regularly buy wine, 38% answered that they buy only during winter, 3% rarely buy these products, 5% very rarely and only 2% have never bought this kind of product. This data indicated that the Macedonian consumers prefer the wine as a drink. As for those who answered that they only buy during winter is due to the fact that the weather conditions are one of the factors that increase the consumption of this product. From the data we can conclude that the percentage of respondents who do not buy this product is very small.

Chart 2: The frequency of buying wine
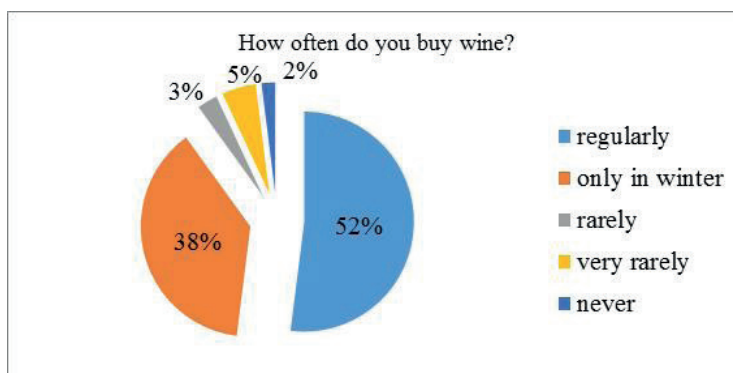
Source: Authors' research

Regarding the question: *Which wine do you buy more?,* the majority of the respondents or 85% answered that are buying Macedonian wine and only 15% of the respondents answered that they buy wine from foreign producers. This data indicates that the Macedonian consumers still prefer and have confidence in the products of Macedonian origin.

Chart 3: The wine origin that costumers regularly buy
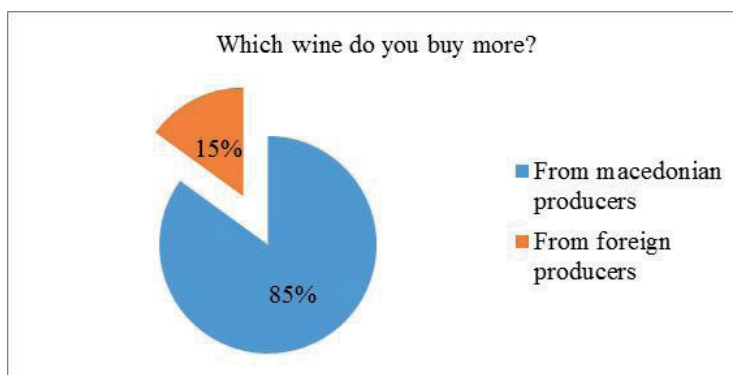
Source: Authors' research

Regarding the question: *Which Macedonian winery do you prefer?,* the majority of the respondents or 49 % buy wine from the Tikves winery, 23% answered that they prefer the Stobi winery, 11% prefer the Povardarie winery, 9% of the respondents prefer the Bovin winery, 5% prefer the Kamnik winery and 3% prefer the Skovin winery. These results can be represented as follows:

Chart 4: Preferable Macedonian wineries
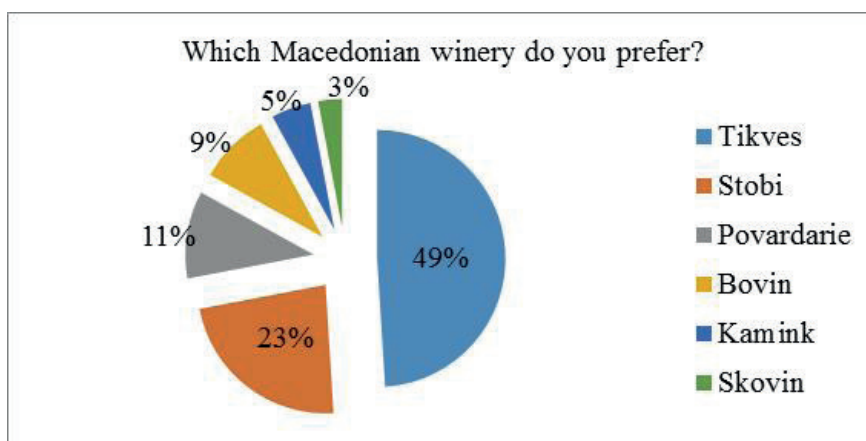
Source: Authors' research

From the graphic chart we can notice that the most of the consumers that were questioned are loyal to the Tikves winery, because they believe in the traditionalism of its products and the original taste of the wine, but on the other hand they are very satisfied with the design of the wine bottles. However, it is not small percentage of loyalty of the consumers to the Povardarie winery, which indicates that in future this winery can be strong competition to the Tikves and Stobi wineries regarding the quality of the wines only if it makes appropriate redesign of the products. The people from Macedonia somehow trust more in their own wineries and believe in the traditional taste of these products.

Regarding the question: *What is the main reason for you for choosing particular wine?*, 38% of the respondents answered that major role in the selection process has the good traditional taste. However, very important influence, according to the 32% of the respondents have the promotional activities, 23% of the respondents emphasize the packing (design) of the products, and only 7 % of the respondents answered that the price has major influence to their purchasing decision.

Chart 5: Reasons for buying particular wine
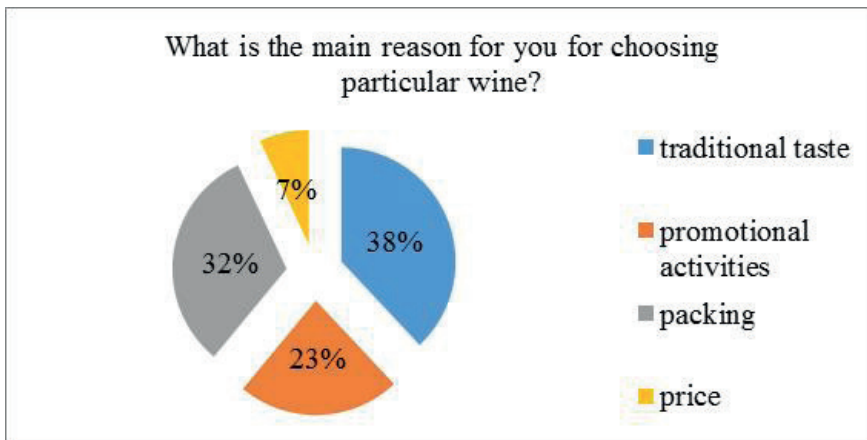
Source: Authors' research

Regarding the question if the wine tasting in the markets affects your purchasing, 78% of the respondents said yes, that the tasting is important for making the decision for purchase especially at this kind of products. 12% of the respondents answered maybe, and only 10% think that the tasting is not important for making decision for purchasing. This is shown in the chart below.

Chart 6: The influence of tasting to the purchase decision
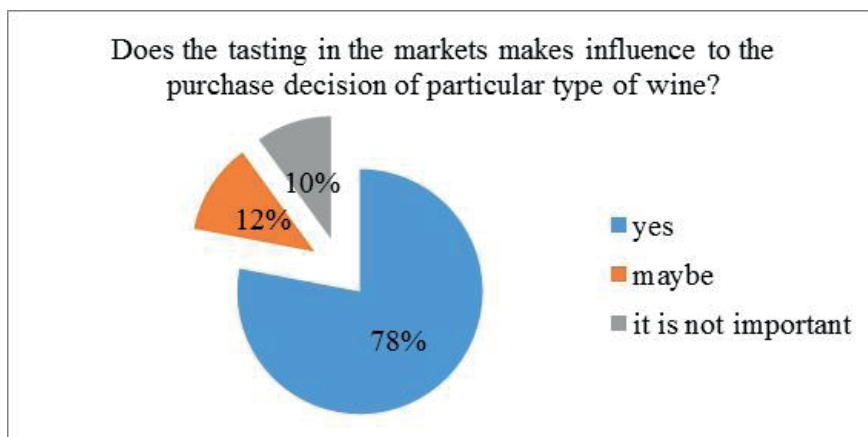
Source: Authors' research

Regarding the question: *Does the tasting in the markets makes influence to the purchase decision of particular type of wine?,* 78% of the respondents answered that tasting in the markets will influence to the purchase decision of particular type of wine, 12% answered that the tasting may influence their purchasing decision, and 10% of the respondents said that the tasting is not important for their decision.

Regarding the question: *Does the packing influence the purchase decision or the type of wine bought?,* 93% of the respondents answered with Yes, 5% answered with No, and only 2% answered with Sometimes.

Chart 7: The influence of the packing to the purchase decision
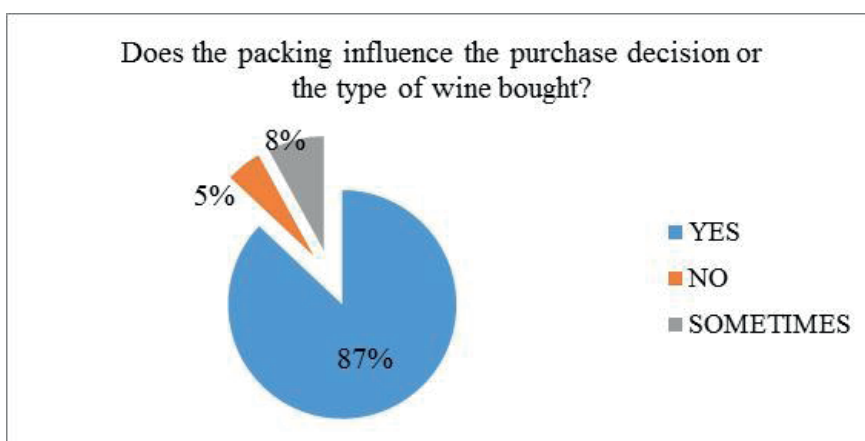
Source: Authors' research

From the chart 7, we can notice that the packing (design) of the products has great influence to purchasing decision making.

Chart 8: The message of the wine bottle design
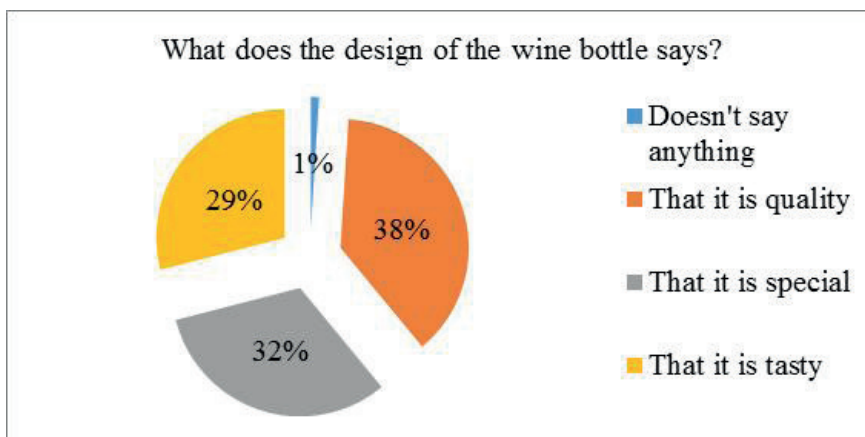
Source: Authors' research

Regarding the question: *What does the design of the wine bottle says about the wine?,* 38% of the respondents answered that it confirms the wine quality, 29% think that it indicates its taste, 32% think that the design of the bottle suggest it is special and only 1% of the respondents think that the design doesn't say anything about the wine. On the basis of the received data of the research can be concluded that the design influence the perception of the consumers and the good design indicates that the product is special and with high quality.

Chart 9: The packaging influence
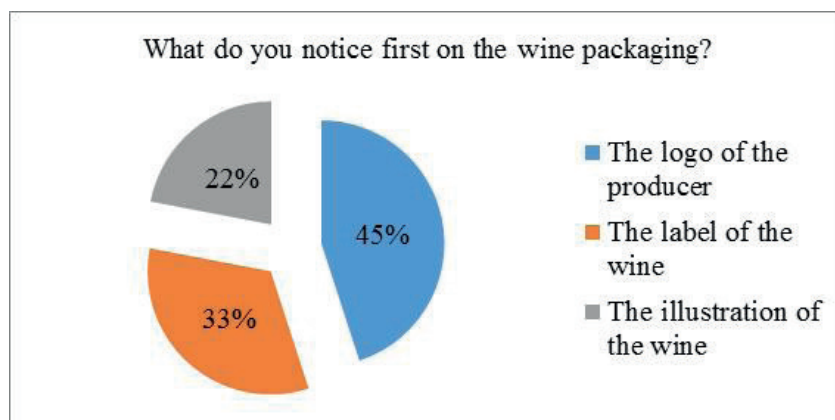
Source: Authors' research

Regarding the question: *What do you notice first on the wine packaging?,* 45% of the respondents notice the logo of the producer, 33% notice the label of the wine and 22% notice the illustration of the wine. This data show that to the consumers is important the producer of certain products and the perception they have for it, but it is not small the percentage of respondents affected by the elements of the design.

Chart 10: What is most important for good packaging of the Macedonian wines
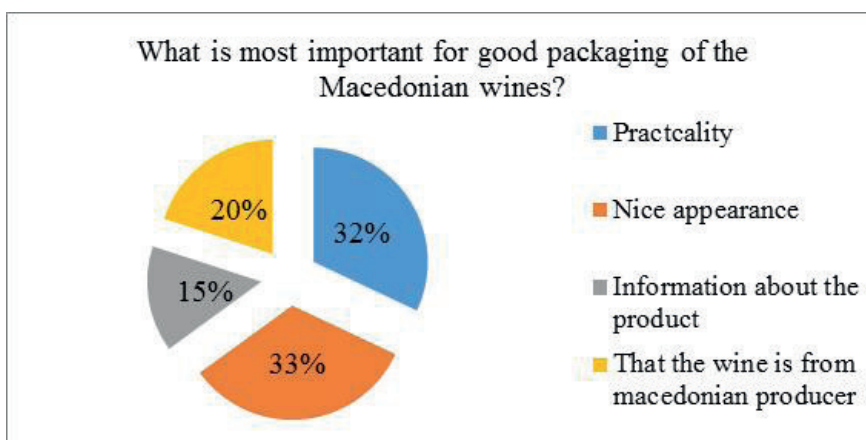
Source: Authors' research

Regarding the question: What is most important for good packaging of the Macedonian wines?, 33% of the respondents answered that the great appearance is very important to them, 32% said that the functionality is important, 15% said that from the packing they expect information about the product, 20% of the respondents are buying the wine because is from Macedonian producer. The data of the research show that the design and the functionality are the most important reasons for making decision for buying when it comes to wines. However, it should not be neglected the fact that the Macedonian customers want to buy wines from Macedonian producers.

Chart 11: The influence of the price to the purchase decision
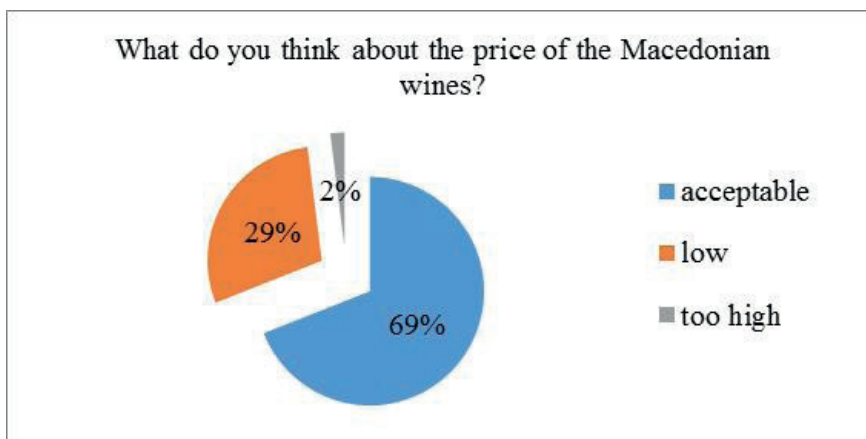
Source: Authors' research

Regarding the question: *What do you think for the price of the Macedonian wines?,* 69% of the respondents think that their price is acceptable, 2% think is too high and the remaining 29% think that it is low. This brings us to the conclusion that the redesign of the packaging should be implemented because the rising of the price is not going to affect the decision for buying.

Chart 12: Factors that affect the purchase of Macedonian wines
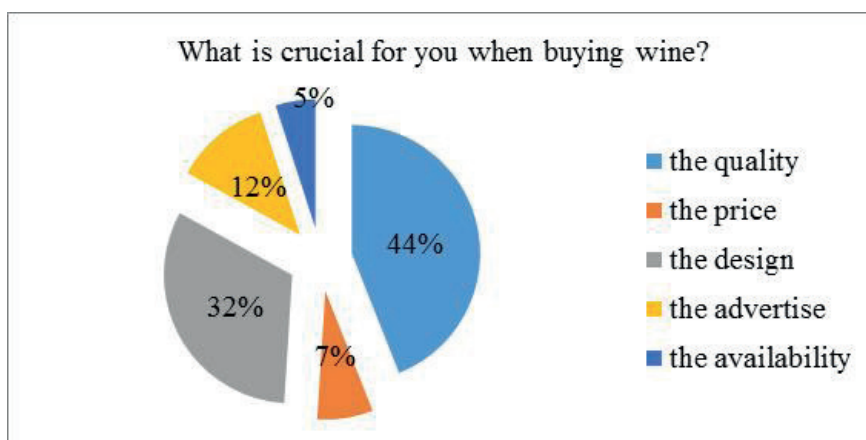
Source: Authors' research

Regarding the question: What is crucial for you when buying wine?, 44% of the respondents said that it is the quality of the wine, 32% said that it is the packing, 7% answered that crucial for them is the price, for 12% of the respondents crucial is the advertising and for 5% of the respondents, crucial is the availability of the product.

According to the research results, the most important factors that influence the purchasing decision of the wine are the quality and the design, and less important are the price, the advertising and the availability.

Conclusion

Regarding the research results, Macedonian wines are recognized as high quality products with traditional taste. The designed packaging is also preferred by the consumers which lead the producers and designers to implement the aesthetic and functional aspects in order to differentiate their products on the market. For one product to be selected and bought, it is necessary to have well designed packaging. The appearance of the product is created by the designer and the brand manager which leads to aesthetic strong and sustained solution that will be presented on the market. The design of the product should refer to the quality and the functionality but at the same time to differentiate the product on the market. This differentiation by the innovative product design or due to its visual appearance can bring competitive advantage to the product. The decision to purchase a product is influenced by different factors depending on the type of the product and their price and demand elasticity. Often, consumers buy daily products depending on the product design.

According to the research, besides the product quality, its visual attractiveness and functionality are key factors that influence the purchase. In fact, the design is the one that attracts the consumers, that differentiates and primarily influences the purchasing decision. Therefore, companies should give special attention to the process of designing its products.

The results of this research confirm that the consumers prefer the wines of the Tikves winery due to the shows that the price of the macedonian wines is not high and gives possibility to approach to redesign which will not drastically change the price of the wine but will make them more competitive on the market. Companies should always take into consideration that the

losses from lower sale due to the bad design are bigger than the anticipated investments for redesign of the products. Even tough, the most important factor for consumers' decision to purchase is the quality, the results from the practice show that the design and the brand are also highly important. The design of the packaging is crucial for the companies' marketing because it has impact to the corporate image. The aim of this research is effectuated, through the directions and opinions that the respondents gave themselves for increasing the attractiveness of the product through innovative design. Therefore, the recommendation for the Macedonian wine companies is to put special emphasis to the design of their products that can bring them better market position, possibility to gain differentiation, originality and finally, increased competitiveness.

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KATERINA BOJKOVSKA[1]

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POSSIBILITIES AND PERSPECTIVES FOR EXPORT OF MILK AND DAIRY PRODUCTS FROM REPUBLIC OF MACEDONIA

Abstract

Agro-food sector in Republic of Macedonia is one of the key sectors and is an important strategic tool in the development of the Macedonian economy as well as in a world trade.

Macedonian market is small and it has limited producing and import – export capacity. With the entering in WTO and aspiration for the integration in EU, we should know that the associations like to have opened the market.

Dairy industry is an important part of agro-industrial complex in Republic of Macedonia. Milk and dairy products belong into the group of food products with high nutritional and biological value and have great importance in the nutrition of people. They are the primary structural components in the total consumption of food in the world.

International marketing is particularly important for the production and sale of milk and dairy products to international markets. The key activities of international marketing management process are relating to the development and promotion of international creative marketing strategies. All elements of international marketing have their own characteristics in the sale of milk and dairy products to international markets.

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Companies-producers of milk and dairy products from Republic of Macedonia, that are oriented towards a successful appearance on the international market, must develop adequate marketing strategy, which will enable creation of competitive advantages in the domestic market and generic strategies for rational approach of international individual market segments.

Key words: dairy industry, international marketing, export.

JEL Classification: M31, Q13

Introduction

Agro-industry has strategic importance for the development of the economy of Republic of Macedonia. This is one of the reasons that topics related to food and agricultural products, and therefore to milk and dairy products, are becoming more current. Milk is a subtle substance of which are affected the safety and security of human health. The general impression is that the situation in this sector is a result to the special position of producers of milk and dairy products in the national economy, but also to the specificity of milk as raw material for further processing.

Dairy industry as an integral part of agrocomplex in Republic of Macedonia has a significant place in the development of the overall economy of the country and in the international exchange market. The dairy industry is an important agricultural branch in every economy. Milk and dairy products also are a significant part of the nutrition of the population, and therefore as an important priority of strategic importance in every country is actually the development of this sector.

The development of dairy industry, with its economic and strong entrepreneurial power, has much progress and development in modern milk processing, which today is characterized by a trend of increase in the production of high quality milk in conditions of reduced production costs. According to this, to the development of the dairy industry should be given primary importance as they could meet the needs of customers in quantity as in quality, and in product range not only in the domestic but also in international markets.

Despite of the dependence on imports of milk and dairy products in Republic of Macedonia, there are many challenges and opportunities for progression of macedonian dairy sector. The process of modernization of production in the primary sector of the dairy industry through modernization of production capacities, introducing new technologies and better education of producers and processors of milk and dairy products, will provide significant improvement in this sector.

1. PRODUCTION AND SUPPLY OF MILK AND DAIRY PRODUCTS IN REPUBLIC OF MACEDONIA

Milk is one of the most important farm products because it has great nutritional value that is necessary for daily human nutrition. Because of these beneficial characteristics, in the domestic market is increasing the demand for milk and dairy products. The supply of the milk market in Republic of Macedonia constitutes the domestic production composed of cow and sheep milk. Goat milk can rarely be found on the Macedonian market, but there is a need to return to the domestic market, especially in the production of dairy products by combining more types of milk.

The total production of cow and sheep milk in Republic of Macedonia in 2001 was 248 390 thousand liters and in 2014 amounted 422 669 thousand liters or for 70% more. In 2014 as opposed to 2001, total cow milk production increased by 90%, while in this same period total production of sheep milk has decreased by 25% (Table 1).

Table 1. Production and supply of cow and sheep milk in Republic of Macedonia (2001-2014)

Year	*Cow milk*		*Sheep milk*		**Total milk production (in 000 l)**	*Index*
	Total cow milk (во 000 л)	**Produc-tion per cow (liters)**	**Total sheep milk (in 000 l)**	**Produc-tion per sheep (liters)**		
2001[1]	200 904	2 096	47 486	54	**248 390**	100
2002[1]	198 431	2 094	51 626	61	**250 057**	101
2003[1]	191 533	2 140	52 466	62	**243 999**	98
2004[1]	212 898	2 362	47 476	49	**260 774**	105
2005[2]	197 464	2 254	48 700	59	**246 164**	99
2006[2]	234 708	2 497	56 582	64	**291 290**	117
2007[2]	373 706	2 880	35 473	66	**409 179**	165
2008[2]	368 217	2 835	38 296	68	**406 513**	164
2009[2]	342 622	3 004	32 934	69	**394 942**	159
2010[3]	347 103	2 787	32 157	60	**379 260**	153
2011[4]	376 290	2 866	25 381	51	**417 236**	168
2012[5]	349 769	2 928	38 616	79	**403 233**	162
2013[6]	380 736	3 009	34 270	70	**415 006**	167
2014[7]	387 008	3 053	35 661	74	**422 669**	170
Index 2014/2001	**193**	**146**	**75**	**94**	**170**	

Source: Own processing based on official data from:

[1]*Annual agricultural report 2004, Ministry of Agriculture, Forestry and Water Economy of RM pp. 129*

[2]*State Statistical Office of Republic of Macedonia,Statistical Yearbook for 2010, pp.389*

[3]*State Statistical Office of Republic of Macedonia,Statistical Yearbook for 2011,pp.397*

[4] *State Statistical Office of Republic of Macedonia,Statistical Yearbook for 2012, pp.406*

[5]*State Statistical Office of Republic of Macedonia,Statistical Yearbook for 2013, pp.410*

[6]*State Statistical Office of Republic of Macedonia,Statistical Yearbook for 2014, pp.420*

[7]*State Statistical Office of Republic of Macedonia, Statistical Yearbook for 2015, pp.420*

However, although milk production in the country has low profitability, in the last years it was a very popular investment. It is important to note

that the productivity of the cows in Republic of Macedonia is very low. This is result to the deficiency of feed derived from domestic sources, from the high cost of imported feed and tax policy for supply of necessary inputs in agricultural production. The yield of milk per cow in 2014 was 3053 liters and the average milk yield per sheep in the same year was 74 liters, so there are noted large variations in yield.

In Republic of Macedonia, the agricultural companies and individual farms participate in the production and supply of milk. In the period from 2001 to 2014, in the total cow milk production the highest participation had the individual producers that have made a significant increase in productivity. This is a result to the increased supply of high producing dairy cows and calfs, the good cow breeding and feeding, as well as foreign donations that support small individual farms in order to improve their development.

In Republic of Macedonia there are 68 registered milk processing capacities that purchase milk from individual farmers and produce high quality dairy products that are represented in the domestic market, and some of them are represented in international markets. Dairy products that are produced in dairies include sterilized and pasteurized milk, yogurt and sour cream, cheese and butter. The production by individual farmers includes: fresh milk, cheese, butter and other dairy products.

2. CHARACTERISTICS OF DEMAND AND MOVEMENT OF THE CONSUMPTION OF MILK AND DAIRY PRODUCTS IN REPUBLIC OF MACEDONIA

Supply and demand are treated as the most significant categories of market relations. In fact, the importance of the demand arises through its mechanism to meet the needs of consumers. On the scope, structure and dynamics of the demand for milk and dairy products affect a number of factors which include: the structure of consumers (the number of employees and type of their work), demographic, sociological, economic characteristics etc. The number, structure and purchasing power of consumers in the market determines the character as one of the essential elements of demand.

The demand for milk and dairy products is a requirement of milk and dairy products of the organized market based on available funds that enable buying of a certain quantity of products to meet the needs of food of consumers.

The demand for milk and dairy products represents the quantity that will be purchased by buyers of a certain area in a certain time period and under certain conditions. This amount has influence of many factors:

- Prices of milk and dairy products;
- The prices of products that are substitutes for milk and dairy products;
- Income of consumers;
- Taste and preferences of consumers;
- The population and its structure;
- Distribution of income and so on.

However, according to the demand for milk and dairy products it is important to give particular importance to the health needs of a particular product. For the consumption of milk and dairy products (products of animal origin) in Republic of Macedonia it is important to note that the consumption of dairy products per habitant is lower than the consumption of the same products in developed countries. Such consumption of milk and dairy products in Republic of Macedonia is resulting from the low income per habitant, but also must not be omitted the traditional eating habits of the people.

The average consumption of milk in the period from 2003 to 2014 in the country is around 180 liters (Table 2). That means that the agricultural households in the Republic of Macedonia contribute with more than 65% of total milk consumption per household. [3]

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[3] http://www.mzsv.gov.mk/files/ZOPOD_%20Javna%20rasprava.pdf (accessed 20.02.2016)

Table 2. Average consumption of milk and dairy products in Republic of Macedonia (per households, in natural units, 2003-2014)

Milk and dairy products	Kg/lit. per household	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2014 / 2013
Milk	Литар	230,8	204,9	209,6	211,3	210,9	184,4	176,2	156,9	138,2	134,7	136,4	127,6	-8,8
Dairy products													127,6	9
- Sour milk and Yogurt	kg	113,7	107,5	118,2	126,6	131,9	127,0	126,0	128,2	121,2	122,1	118,6		
- Cheese (all types)	kg	64,9	57,2	63,8	66,4	67,8	69,4	72,3	77,2	75	73,2	68,0	68,5	0,5
- Other dairy products	kg	41,4	42,0	45,1	49,0	51,2	47,0	44,4	42,0	37,5	38,9	40,1	37,1	-3
	kg	7,4	8,3	9,3	11,2	12,9	10,6	9,3	9,0	8,7	10,0	10,5	9,5	-1

Source: Own processing based on official data from Statistical Yearbooks , State Statistical Office of R.Macedonia, 2003-2014

As can be seen from Table 2, that in 2014, in relation to 2013 the consumption of dairy products including the yogurt was increased for 0.7%. In this same period, is reduced the consumption of milk for 6.4%.

Macedonian citizens are traditional consumers of milk and dairy products. The latest research shows that Macedonians are less consuming milk as a milk product. However, domestic consumers said they prefer to buy domestic products against of imported products. In the past five years, consumption of milk has decreased for about 20%. The reason for this decrease in consumption was the reduced domestic production and imports of milk and milk products at lower prices compared to the prices of domestic production. Therefore, in Republic of Macedonia is increasing the consumption of imported milk products and it is a very important reason for the decrease in consumption in the domestic market.

The scope and intensity of demand is largely determined by the type and number of participants in consumption. Depending on the demand for milk and dairy products, the most numerous and most important participants are individual consumers. In fact, the number and structure of the purchasing power of individual consumers determines the character of the demand which is one of the main elements of demand.

Despite the impact of the prices of milk and dairy products, very significant impact on the demand have certain non-price factors affecting on consumer decisions to buy milk and dairy products. In fact, this includes the views of consumers in terms of knowledge of the nutritional value of milk and dairy products in their nutrition, and such knowledge of consumers, primarily depends on the level of income of consumers.

The participation of young people from 0 to 14 years, from 2003 to 2013 decreased from 20.4% to 16.9% of the total population of Republic of Macedonia[4]. This is another indication of the decrease in consumption of dairy products in the country. The analysis of the consumption in Republic of Macedonia shows that the average salary per worker in 2014 was 22 407 denars and in 2013 increased by 4.6%. During this period, the opportunities to buy cow's milk increased by 3.6 %. The average household in Macedonia, around 66.1% of its consumption spends to meet basic needs for food, clothing, housing and furnishings. The costs of living according COICOP classification in 2013 have increased by 2.8% on annual basis.[5]

All above mentioned factors have a significant impact on the consumption of milk and dairy products and greatly affect on its scope.

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[4] State Statistical Office of Republic of Macedonia: "Macedonia in numbers 2014", pp. 31
[5] Ibidem

3. PARTICIPATION OF MILK AND DAIRY PRODUCTS IN INTERNATIONAL – TRADE EXCHANGE OF REPUBLIC OF MACEDONIA

International trade with milk and dairy products is an integral part of the total world trade. Today, trading takes place in very complex relationships and significant differences in the level of economic development of the countries.

International trade achieves significant functions and tasks within each national economy. Through the placement of surpluses and import of scarce milk products, in modern conditions, is allowed appropriate involvement of the products of the dairy industry in Republic of Macedonia in the foreign - trade flows and it has fundamentally important role in economic development of the country. The development of international economic cooperation is the basis of the export-oriented concept of the dairy industry in Republic of Macedonia.

3.1. Imports of milk and dairy products

In Republic of Macedonia, in order to influence directly on the formation, dynamics and structure of supply on the domestic market is performed import of deficient agricultural products (especially some raw materials).

The import of milk and dairy products in Republic of Macedonia is largely determined by the domestic demand for these products, and how much the domestic production is able to meet that demand.

Domestic production of milk satisfies 86% of domestic consumption, while the rest is completed through import of butter with 38%, various types of cheese (Gouda, Edam, Trappist, etc) with 18%, milk powder (fat 1.5%) with 17% and milk (with a fat content of 1-6%) with 11%. The average import is estimated at 68 200 tonnes of milk that satisfies 23% of the total domestic consumption of milk. In the last five years (2010-2014) there was an increase in imports of dairy products and eggs for about 25% in 2014 compared to 2009. In 2014 the imports of dairy products and eggs was 0.8% of the total imports in Republic of Macedonia[6].

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[6] Own processing based on official data from State Statistical Office of Republic of Macedonia: „Statistical Yearbooks 2010-2015".

Therefore, can be concluded that Republic of Macedonia is a net importer of milk and dairy products and the state have to take appropriate actions to protect the domestic production of milk and dairy products.

3.2. Export of milk and dairy products from Republic of Macedonia

The economic activity of Republic of Macedonia within the former Yugoslavia, was extremely focused on international trade. This led to high trade intensity compared to the production. The traditional role of Macedonia was to export raw materials and semi-finished industrial and food products in other republics for their further processing or export to other countries mostly in Central and Eastern Europe.

This system almost completely finished after the independence of Republic of Macedonia and resulted with losing of these traditional trade relations. The exporters of semi-finished products, therefore, were forced to develop new trade relations with consumers. In the recent years are rebuild commercial relations with other republics of the former Yugoslavia. Consequently, some basic food products again are exported to the neighboring countries. [7]

In table 3 is shown the value of export of milk and dairy products, eggs, honey and animal products as a group of agricultural and food products according to the Standard International Trade Classification (SITC). Therefore, in 2003 the export of milk and dairy products is approximately 64% of the export of the whole group of products (milk and milk products, eggs, honey and animal products) and in 2004 the export of milk and dairy products have increased for approximately 86% of the export of all products.

Table 3. Trend of exported milk and dairy products, eggs, honey and other products of animal origin, 1998-2005, in 000 euros

Description	Export from Republic of Macedonia, in 000 euros							
	1998	1999	2000	2001	2002	2003	2004[1]	2005[1]
Milk and dairy products, eggs, honey and other products of animal origin	1 085	2 450	4 779	1 442	1 171	2 195	3 016	6 117

Source: [1]Annual agricultural report 2004, Ministry of Agriculture, Forestry and Water Economy of RM pp 131

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[7] Center for Economic Analysis: 'Interventional measures to stimulate exports and reduce the trade deficit' 2005, www.cea.org.mk

[2] *Annual agricultural report 2005, Ministry of Agriculture, Forestry and Water Economy of RM pp op.cit. CD – ROM*

According to the export of milk and dairy products, in 2003 it was 1.4 million EUR (increasing by 99% compared to 2002). The most imported products were milk and cream (87%), cheese (6%) and other dairy products (7%). In 2004, the export value of these products has increased significantly for 86% (90% were milk and cream). [8]

The export of milk and dairy products from Republic of Macedonia in 2003 was 3 657 tonnes of milk with an export value of 1.25 million EUR and 2.5 tons concentrated milk. This value is two times higher compared to the previous year. 98% of the total export of milk was in Greece.

If from 2000 to 2005 the export of milk and dairy products from Republic of Macedonia increased for 70%, from 2005 to 2007 decreased for 15.8%. Only in the last two years the total export of milk and dairy products decreased for 18%.

Table 4. Trend of dairy products and eggs, 2006-2014, in USA dolars

Description	Export from Republic of Macedonia in '000 USA dolars								
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Dairy products and bird eggs[1]	6083	6353	9648	6431	7916	10937	11290	9520	12206

Source: State Statistical Office of Republic of Macedonia: Commodity Exchange, 2006-2014

The export of dairy products and eggs in 2009 decreased for 33% compared to the export in 2008 which is a significant reduction that leads to a reduction of the overall export value (Table 4). The decrease in export is result to the reduced production of raw milk due to significant distortion in the dairy industry in Republic of Macedonia during that period. In 2010 there was an increase in the export of dairy products and eggs for 23% that is leading to an increase in export value, which affected on the reduction of the trade deficit in the dairy industry in Republic Macedonia. This increased export continued in the following period (until 2014). Therefore, can be distinguished the increase of exports of dairy products and eggs in 2014 compared to 2006 for 101%. The average export for the analyzed period (2006-2014) was 8 932 000 US dollars.

In the period from 2006 to 2009 from Republic of Macedonia mostly were exported milk, cream and cheese (Table 5). The *milk and cream with fat content of 1% to 6%* usually were exported in Greece and Bulgaria,

[8].Annual Agricultural Report, 2004, pg.54

while the main export destinations for all kinds of *cheese* were Serbia and Montenegro. In the period from 2010 to 2013, cheese is the most exported and as the most important export destinations are Kosovo, Montenegro and Serbia, while milk and sour cream with fat content of 1% to 6% were the most exported in Kosovo.

The situation with the export of milk and dairy products is very bad. The category of dairy products and eggs has very little participation in the total export of products of Republic of Macedonia (Table 6). That participation was greatest in 2005 (0.37%) and lowest in 2002 (0.13%).

This confirms the fact that the participation of dairy products in the international trade of Republic of Macedonia is very low.

According to the macedonian small market, the production and import and export capabilities are limited and without any opportunity to influence on the flow of world trade. WTO entry and inspirations of the state to join the North Atlantic Alliance and the EU, require open market and monitoring of norms and standards imposed in the flow of world trade and using their experiences. Market requires monitoring and information sharing of the common trade.

The main disadvantages in terms of conditions in the economic and legislative framework are: political instability, high trade deficit and current account deficit, inadequate and non- transparent implementation of laws and deficiency of active promotion of investment. This certainly has a negative impact on the food sector and its future perspectives.

Individual farmers from Republic of Macedonia are not sufficient technologicaly developed, and do not have enough funds to purchase the necessary technology, which is expensive and it is one of the reasons they do not increase milk production and dairy products, and represents one of the factors that restrict the exports. This applies especially to the poor structure of the primary sector and its weak economic and financial power for development i.e. their weak financial condition as well as problems with the collection of funds for raw materials.

Other factors that limit the export of milk and dairy products are[9]:

➢ Reduced number of livestock and weak genetic predispositions affecting the racial composition of livestock.
➢ Non-standardized raw milk and microbiological composition due to

[9] Бојковска К.: "Креирање на меѓународни маркетинг стратегии за извоз на млеко и млечни производи на странските пазари", докторска дисертација, Економски институт – Скопје, 2012, pp. 244-245

an unbalanced nutrition and poor hygiene conditions which disables export of Macedonian dairy products, and at the same time leads to a reduction of total exports.

➢ The relatively low purchase price of raw milk.

➢ Deficiency of raw milk.

➢ Deficiency of working capital and access to funding sources.

➢ Expensive import of machines and equipment for the processing and primary sector.

➢ Insufficient number of dairy products that bring higher income for producers.

➢ Uncontrolled imports of various dairy products (sterilized milk, fermented dairy products, milk powder, different types of cheeses, etc.).

➢ System problems like poor infrastructure and expensive resources that make Macedonian industry uncompetitive in European market.

➢ Extensive documentation, finding an effective partner abroad, deficiency of knowledge of foreign markets, knowledge of foreign channels of distribution, deficiency of knowledge of customs and non-tariff barriers, language barriers, transport, financing and payment etc.

➢ Deficiency of appropriate international marketing strategy and inability to promote the export strategy of the companies and inadequate planning of export activities of the entities of milk processing industry.

➢ The biggest deficiency in the Macedonian export of milk and dairy products is that companies do not have plans. This is a particular problem that needs to be defined and analyzed in order to promote the export strategy that can greatly help companies in export planning activities.

All these factors affect the Macedonian producers of milk and dairy products being more attracted to the domestic market and to pay more attention to the changes that come from the global market, such as the appearance of new products, new style, new needs and new market segments, the new customer needs, the appearance of new competitors etc. which complicates the proper implementation of international marketing strategy.

If, for a short period are not eliminated the mentioned deficiencies the Macedonian dairy industry will not be able to move in a positive direction. Although the entry into the WTO has initial maintain of the high customs protection measures for the domestic production, they for a long period of time can be abolished.

Manufacturers expect from the state to take legal and stimulative

activities in terms of setting and improving the situation in this sector. Many developed countries with better conditions for profitable development of farming protect their production and Republic of Macedonia must take appropriate actions for its improvement.

4. STRATEGIC OPTIONS IN THE PROCESS OF INVOLVING OF THE MACEDONIAN MILK PROCESSING CAPACITIES IN INTERNATIONAL EXCHANGE

Macedonian economy is weak, but for its survival and development is needed international economic cooperation. The involvement in international flows is the strategic objective to producers of milk and dairy products as main participants for the activity to increase production. That way allows acceleration of the growth of economic entities and the overall socio-economic development.

The concept of globalization pushes the boundaries of making economic decisions of companies that are producing milk and dairy products from the level of national economy to global level. Therefore, main task of international marketing is the application of basic principles, concepts, tools and practical marketing -acting in international business activities of companies, covering many aspects of modern management.

When the company decides to participate on the international market should choose the best available strategic model. Most of the Macedonian companies that are producing dairy products try to achieve economic effects only through maximizing the total sale through the application of classical export strategy or to sell the surplus domestic production to foreign consumers, as one of the generic strategic modalities available to the companies.

The export is a very wide area in international marketing and to the producers of milk and dairy products provides a number of alternative ways to deliver their products abroad. Very often, many companies organize their basic activity (production) within the borders of their own country and in international exchange include various forms of export modalities. The basis for selection of strategic options is the analysis of the advantages or disadvantages of the alternatives.

For that purpose, it is necessary adjustment of the various conditions and ways of working between local and foreign markets i.e. adjusment of existing differences. Macedonian entities - producers of milk and dairy

products, essentially deal with international trade, which by its nature is strictly conventional and presents a certain type of pre marketing phase in the development of international marketing strategies.

To overcome this situation it is necessary leaving the current concept that apply commercial entities and its replacement by a marketing concept as an important philosophy in business behavior of managers.

Producers of milk and dairy products should not be restricted to use only the aforementioned strategies for entering the international market but need to combine other strategies that are available, all depending on before set goals and strategy of companies that are producing milk and dairy products. Besides the classic export for producers of milk and dairy products are available other models that would enable successful entry to foreign markets. These are: licensing of products, product franchise, joint investment, wholly owned subsidiaries etc. Producers of milk and dairy products should plan direct or joint investmens in other countries, which will greatly increase the placement of milk and dairy products in international markets.

Another available alternative to producers of milk and dairy products is an investment in subsidiaris of companies, which would be better than certainly to be considered that the dairy products of the company will win at the market. The entrance to the market with the help of intermediaries, through licensing or joint investments with local companies in that country is a preferred tool in preparation for entering the international market where will be placed milk and dairy products of the company. Especially are suitable joint investments because they allow to the companies that are producing milk and dairy products to share the financial risks with their partners, while simultaneously, at the same time they are doing the expertise of the local market.

According to the export, the production of milk and dairy products is located in the domestic market, while all other strategic modalities include production in other countries. In practice, for the choice between exports and local production, deciding factors are the costs. Except in terms of costs, local production of milk and dairy products offers certain advantages associated with market proximity, for example, better influence in the design and modification of products, better service and faster information about market trends.

But the experiences of most countries that are exporting milk and dairy products shows that the traditional models of classical approach to enter the international market through export of surpluses of milk and dairy products can not be the basis for business success to producers of milk and dairy

products in a long term. The producers should be directed to the application of modern and complex structured modalities that will enable efficient and profitable involvement in international economic flows.

Regardless of which of the strategic modalities that are available will decide and apply producers of milk and dairy products in their approach to foreign markets, it is necessary to be possible for them to adjust with flexible objectives, resources and their opportunities with variable conditions of the target markets that will decide to perform in a certain period of time.

The choice of entry strategy in the international market is one of the most important international decisions that should be made by the companies-manufacturers of milk and dairy products from Republic of Macedonia. Creating successful international marketing strategies should be a priority for all milk manufacturers that are included or in the future tend to be included in international economic flows.

5. KEY POINTS OF THE STRATEGY FOR EXPANSION IN EXPORTS OF PRODUCTS OF THE DAIRY INDUSTRY

For any economy, especially for small and open developing economy such as Republic of Macedonia, the international trade is essential for economic development.

The expansion of export of milk and dairy products from Republic of Macedonia is determinating the growth and modernization of the macedonian dairy industry and this will contribute to the development of the macedonian economy.

Macedonian export strategy for milk and dairy products should be based on the **expansion of the quantity and improved structure of the export**[10] in order to increase the volume of international exchange and gradually reduce the deficit in the current account balance. Such a development strategy derives from the characteristics of the macedonian economy as small and open European country, as well as from the positive experiences of countries that have achieved fast and dynamic economic development. The strategy of expansion in exports of milk and dairy products is more adequate for Republic

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[10] Бојковска К.:"Креирање на меѓународни маркетинг стратегии за извоз на млеко и млечни производи на странските пазари", докторска дисертација, Економски институт – Скопје, 2012, pp. 283

of Macedonia due to the limited absorption capacity of the domestic market and the production potentials of macedonian companies - producers of milk and dairy products.

Active and consistent developmental and international trade politics[11] can contribute to the expansion of exports of milk and dairy products. Republic of Macedonia as a small and open economy can generate permanent economic progress and sustainable external balance only with politics and measures for economic growth based on the strategy for expansion of exports. The state should provide complete adjustment of the economic and legal system in the area of international trade to the ruling relations as well as the norms and standards of the European and other developed markets.

Based on a clear strategic commitment is needed systematically and continuously implement an active international trade policy, in coordination with monetary - crediting and fiscal policies, particularly with investments from domestic and foreign sources, making efforts to attract foreign direct investments and efforts to expand the bilateral agreements for free trade with neighboring and other countries.

The affirmative politics for support and strengthening of the export of milk and dairy products at the same time induces a wide spontaneous process of reallocation of the resources from the production of milk and dairy products for the domestic market, in the production of dairy products intended for export . In fact, in such a way is realized a reallocation and more productive valorization of available resources.

Trade liberalization has been accepted as the only way to increase the participation of international markets[12], which enables monitoring of the ruling world trend and adaptation to the principles and rules of the market dictated by the the developed and major economies through international and regional organizations and powerful multinational corporations. Republic of Macedonia should adopt a program for further reduction or eventually elimination of customs rates for certain products. It is necessary complete abolition of customs for certain inputs (machinery, equipment etc.) that are not produced in the country. It is necessary also to reduce the custom rates on imports of certain agricultural and food products. In general, the primary purpose of the measures of international trade should always be: support of

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[11] Ibid, pp. 284

[12] Бојковска К.:"Креирање на меѓународни маркетинг стратегии за извоз на млеко и млечни производи на странските пазари", докторска дисертација, Економски институт – Скопје, 2012, pp. 285

export and export-oriented production.

Free economic zones[13] can present direct promoters of exports, technological and structural modernization of the economy and integration into the modern economic trends. With the free economic zones is realized intensifying of investments, especially with the entry of foreign investments, to bring a modern technology to expand export opportunities and especially to hire new labor force.

Conclusion

Republic of Macedonia, as a result of higher import of milk and dairy products, in the last five years realized only deficit, but anyway the conclusion is that commercial entities – producers of milk and dairy products in Republic of Macedonia have potential to export their products and to take part in the international market.

Moreover, the companies should be focused on implementing new and complex structured modalities which will enable companies more efficient and profitable participating in international trading flows, while coordinating their flexible goals, available resurces and their possibilities for changing conditions in the target markets that they will decide to take part in a certain time period.

Strategic task of management of companies – producers of milk and dairy products is continuous monitoring of the modern world trends and finding new ways for taking part in the international markets which will enable coordinating with the flexible goals, available resurces and their possibilities for changing conditions in the target markets that they will decide to take part in a certain time period.

The strategy of including i.e. the strategic forms of working abroad are directly connected with long-term stable position of the commercial entities – producers of milk and dairy products.

The international trade with milk and dairy products is an integral part of the total world trade that takes place in conditions of complex relationships and differences in the level of development of certain countries, regions and economic groups. Despite all the efforts to liberalize world trade, international trade in agricultural and food products is a domain that is restricted and

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[13] Ibidem.

regulated by measures of various kinds.

The regional orientation of foreign trade of Republic of Macedonia in the part of dairy industry is characterized by high concentration of a small number of trade partners of which only a few are considered strategic and this can lead to potential danger from economic stagnation. In the future, besides keeping the good business relations with traditional partners, export-oriented milk producer should take especially attention to the expansion of exports and entering new markets by increasing the number of export destinations. To achieve this goal it is necessary to use the advantage of the signed bilateral free trade agreements because they contain preferences in trade with food products in the form of export customs free quotas.

The development of international economic cooperation represents the basis of export oriented concept of dairy processing industry in Republic of Macedonia. As a result of low value of the export (based on simple laws of economy of scale and transport cost), as well as weak competitiveness according to price and quality of the dairy products and high cost for entering to the new markets the producers of milk and dairy products are forced to sell their products in the neighboring countries.

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DIANA BOSKOVSKA[1]

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RISK OF SHARES ON THE MACEDONIAN CAPITAL MARKET MEASERED BY THE BETA COEFFICIENT

Abstract

Risk is one of the key variables in making appropriate investment decision. In literature there are more variables to assess the risk of an investment. When analyzing the finances, especially when considering share as a dominant financial asset on the capital market, the most commonly used measure is the beta coefficient. Based on this variable is determined the risk of a given share in achieving the expected yield of this share. In theory, but in the practice also, there is a positive correlation between yield and risk.

The paper subject is the determination of the beta of the Macedonian capital market. To simplify the calculation of this coefficient does not take all the shares on the Macedonian Stock Exchange, but only shares entered in the market index MBI 10. Also, the paper analyzes the relation between the rate of return and the risk involved in MBI 10. Based on this research, it proves the existence negative correlation between yield and risk so it contrary to findings from the literature and the usual world practice, which causes a need for analysis of the reasons for this state of the capital market in the country.

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JEL classification: G11, G12

Introduction

When analyzing the efficiency of equity investments despite the rate of yield, the risk is the key variable, too. In theory there are several measures for the riskiness of the shares.

A beta as a measure of risk is taking in the paper, that is key variable in the CAPM (Capital assets pricing model).

Determining the riskiness of shares is made on the example of the Macedonian Stock Exchange (MSE), but it is not taken into account the market portfolio, but only the shares entering in the market index (MBI 10). The purpose of the paper is to perceive the risk of equity for a given period of capital market in the Republic of Macedonia based on the risk of shares only to companies entering in the market index MBI 10. It allows to see the relation between yield and risk of shares of the Macedonian capital market, from one hand, but on the other hand provides the basis to compare the rate of return and risk between different alternatives of investing on the capital market (shares, bonds, deposits, loans, etc.), that is relevant to making appropriate decision by investors.

1. **CONCEPT AND SIGNIFICANCE OF BETA COEFFICIENT**

In the financial literature, there are several measures of risk exposure of financial assets. The widespread measure for determining the riskiness of financial assets, especially when it comes to stocks is beta (beta coefficient).

It is a measure of the systemic risk, representing the relevant risk in a diversified portfolio. Therefore, its value implies the risk of a specific asset in relation to its market portfolio as well. Namely, this coefficient measures the variability of the rate of return of individual securities in relation to the

variability of the average rate of return of the overall market portfolio. The value of the beta coefficient is positive and can be above or below + 1. The value of the beta coefficient greater than +1 implies greater variability in the required rate of return of the relevant securities (shares) in relation to the variability of the average of the total market portfolio. Therefore, such securities will be risky, but also carry higher yields. Most shares have a beta-coefficient that ranges from 0.5 to 1.50. When the value of the coefficient is equal to 1, the risk of the relevant security equals the risk of the market portfolio or, in other words, the required rate of return for the particular security will equal with the average rate of return of the market portfolio. If the value of the beta coefficient is less than 1, for example 0.5, the risk of a particular share will be half then the market portfolio, and when its value is +1.5, the risk of a share is about 1.5 times the risk of the market portfolio. In terms of the rate of return, it would be reflected in such a way that in the first case with a change in the average rate of return on the market portfolio by 1%, the rate of return of the particular share would change up to 0.5% and for the second case up to 1.5 %. Theoretically, the beta coefficient could have a negative sign, but in practice this is not confirmed.

There is a linear dependence between the required and the expected rate of return and risk (systemic risk ß), because of which a higher risk would condition a higher required rate of return.

When there is an equilibrium in the capital market, a case when all investors have all available information, all the assets or portfolios should have a value at which their estimated rate of return is consistent with the level of systemic risk and there is an equivalence between the estimated expected and required rate of return. In the opposite case, when the market is not perfect, the assets could have an overestimated or underestimated value. Specifically, if the estimated expected rate is above the required rate of return, the value of the asset will be underestimated and vice-versa, overestimated when the expected rate is below the required rate of return. The type of decision that will be made depends on the relationship between these two rates. That is, if an asset has been undervalued than it would be best to make a decision to buy, and if the value has been overestimated, a decision to sell should be made.

2. THE DETERMINATION OF BETA COEFFICIENT

The beta coefficient is calculated according to the equation:
where:

$$\beta = \frac{Cov_{i,m}}{\sigma_m^2} = \frac{(Ri - \overline{Ri})(Rm - \overline{Rm})}{(Rm - \overline{Rm})^2} \quad (1)$$

- $Cov_i m$ is a covariance of the yield of certain share and yield of market portfolio (or market index)
- Ri – monthly yield of share i;
- $\overline{Ri}$ – average yield of share i;
- Rm – monthly yield of MBI 10;
- $\overline{Rm}$ – average yield of MBI 10;
- $\sigma^2 m$ – variance of yield of the market portfolio (market index).

The Beta coefficient of individual securities (shares), besides mathematically, can also be determined by using a graphical method.

The graphical method primarily allows for visual representation of the beta coefficient. The slope of the curve, which shows the dependence between the rate of return of the specific share and the portfolio, actually represents the beta coefficient. The greater slope indicates a greater value of the coefficient, and therefore greater risk, and vice versa. The slope of the curve, i.e. the beta coefficient in this method is determined as the ratio between the change of the rate of return for the concrete share and the market portfolio.

$$\beta = \frac{\Delta Y}{\Delta X} \quad (2)$$

- ΔY – change of the rate of return of share i;
- ΔX - change of the rate of return of market portfolio;

Based on the previous formula, it can be concluded that the size of the coefficient will be determined, first of all, by the level (coefficient) of the correlation between the share and the portfolio, and secondly, by the

relationship between the variability of the rate of return of the specific share and portfolio (σi/σm).

Because diversification reduces the non-market risk, for analysis purposes, only the market risk remains relevant, and as we mentioned it is measured through the beta coefficient. With this in mind, the question is how long should diversification be performed by increasing the number of assets in the portfolio. The impact of diversification on non-market risk depends on several factors:[3]

- The relative share of individual securities in the total value of the portfolio;
- The size of the non-market risk for certain types of securities;
- Whether diversification is performed within one industry or with invests in more branches, etc.

The first two factors are covered by the formula:

$$D = \frac{1}{\sum_{i=1}^{n} w_i^{\,2} r_i^{\,2}}$$ (3)

where:

- D- deversifiaction of the portfolio;

- wi – relative share of the share in the total value of the portfolio;

- ri – relative non-market risk of share i, while: $r = \sigma_{\dot{e}} / \sigma_{c^*}$;

- $\sigma_{\dot{e}}^{\,2}$- non market risk of share;

- σc – non market risk of the typical (average) share

When the portfolio is comprised of typical shares (shares whose relative non-market risk is one), with equal participation in the total value of portfolio, diversification D will be equal to n, the number of shares included in the portfolio.

In terms of the relationship between the risk (standard deviation) and the number of securities, practice has confirmed that maximum benefit from diversification is achieved by increasing the number of assets in the portfolio of 12 to 18 securities. But if the cost of transaction is to be included, the number of securities increases to 30 for investors who lend, and to 40 for

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[3] Boskovska Diana, Shares-instruments of portfolio management, Institute of economics, Skopje, 2014, p. 46.

those who borrow. But there are authors, who based on their many years of work and experience in analysis of securities, represent the opinion of not such a broad portfolio diversification. One of the proponents of this group of authors is author William J. O'Neil, who states that "there is no need to own twenty or more shares. Simply, you cannot know everything that you need for as many shares and to achieve great success." His recommendations are that for an amount of $ 5,000 not more than two types of shares should be bought, and for the amount of $ 100,000 five or six different types of shares.[4]

3. THE DETERMINATION OF BETA ON THE MACEDONIAN CAPITAL MARKET

The MBI 10 Index is used to determine the beta coefficient of the Macedonian capital market. The MBI Index consists of common shares up to 10 listed companies, selected according to the criteria from the methodology for calculation of the MBI 10.[5] The Macedonian Share Exchange Index is a price index weighted by market capitalization, which is located on the free market (free float), adjusted for dividend payments, with limit that on the day of revision the stake of each share-part of the index is not over 20%.

According to a revision of the Macedonian Share Exchange Index conducted on 27.12.2013, the following companies are included in the composition of this index:[6]

• Alkaloid AD
• Replek AD
• Granit AD
• Komercijalna Bank
• Makpetrol AD
• Stopanska Banka AD Bitola
• Macedonski Telekom AD Skopje
• Makedonija turist AD
• Toplifikacija AD

Monthly data on yields of individual shares included in the MBI 10, as well monthly yield of the index MBI 10 for the period 31.01.2005 to 31.03.2014, are used to calculate the variance and covariance, which

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[4] O'Neil J. W.: 24 basic lessons for successful investment" translated into Macedonian, Commission of securities of Republic of Macedonia, Skopje, 2002, p.123.
[5] http://www.mse.mk/mk/content/13/3/2010/structure-of-index-mbi10
[6] http://www.mse.mk/mk/content/13/3/2010/structure-of-index-mbi10, accessed on 5.5.2014.

are determined according to the equation for calculating the yield (rate of return) given previously (equation 1). Monthly data on yields of individual shares included in the MBI 10, as well monthly yield of the index MBI 10 are obtained by the following equation:

$$Rate\ of\ return = \frac{\text{Sale price} - \text{Bay price} + \text{dividend}}{\text{Bay price}} \quad (4)$$

The data calculated for the average yield of individual stocks a for the period analyzed, are given in Table 1.[7] Also in this table is calculated the value of the covariance of individual stocks.

Table 1. Average yield, covariance and beta of the individual stocks included in MBI 10

Company/MBI 10	Average rate of return %$\overline{Ri}$	Covariance (Ri-$\overline{Ri}$)(Rm-Rm)	Beta coefficient (Ri-$\overline{Ri}$)(Rm-$\overline{Rm}$) (Rm—$\overline{Rm}$)²
Granit AD Skopje	2,81	2,1809	1,3356335
Alkaloid AD Skopje	1,50	1,5738	0,9638008
Komercijalna banka AD Skopje	0,18	0,8877	0,5436135
Replek AD Skopje	2,4	0,6917	0,423584
Makpetrol AD Skopje	1,77	1,6341	1,000734
Stopanska banka AD Bitola	0,01	0,9531	0,583666
Makedonski telekom AD Skopje	0,17	0,3988	0,345089
Makedonijaturist AD Skopje	1,42	0,9245	0,566162
Toplifikacija AD Skopje	0,94	1,7676	1,082503

Source: Own calculation based on data obtained from www.mse.org.mk

But to determine the beta is necessary to determine the average return of the market index MBI-10 for the same period (based on calculations is 1.1794%) and the variance (with value 1.1556).[8]

So, the value of the beta coefficient for the individual shares of MBI 10 determined on the basis of the previously given equation 1 is presented in Table 1. Based on this table, it can be seen that beta is the greatest for the Granit AD Skopje company, with the values of 1.33, and for the Macedonian Telecom is 0.345,that is the smallest from all others. Based on these data, it

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[7] In the calculation dividends are excluded.
[8] Own calculation based on the data from www.mse.org.mk.

can be seen that the share of the Granit AD Skopje company has the biggest risk, while the least risky share is the share of Macedonian Telecom. It actually means that when changing beta for 1 percent, the rate of return of the company Granit AD Skopje will change for 1.33%, while for the company Macedonian Telecom AD for 0.34%.

4. ANALYSIS OF THE RELATIONSHIP BETWEEN THE BETA AND THE EXPECTED RETURN OF SHARES

As previously stated, there is a positive correlation between yield and risk. For this purpose the paper examines the relationship between yield and risk of the shares in MBI-10. CAPM mode is used for calculating the yield of shares. Based on this model the yield is determined according to the following equation:

$$E(Ri) = Rfr + \beta i(Rm - Rfr) \quad (5)$$

Based on the above equation, it can be seen that there are three elements in building the model for assessment of the rate of return of assets:

1. The rate of return of free risk investments (Rfr). Here, it should be noted that the yields of government securities is most often used as the rate of risk-free investments.

2. The coefficient of variability of yields of company shares in relation to the average variability of returns of all shares in the capital market. This ratio is called the beta (β) coefficient and represents a measure for the risk of holding shares of a particular company in relation to the shares of all companies listed on the capital market.

3. Market risk premium, as an additional risk of holding shares as a riskier asset in relation to the government securities, (Rm- Rfr).

According to the previously state, for the shares included in the MBI 10 to calculate the rate of return under the CAPM model, after determining the beta and average market yield, remains to be determined the risk-free rate of return. The interest rate of the treasury bills of the National Bank of the Republic of Macedonia[9] is used for the risk-free rate of return Rfr in the

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[9] Treasury bill is a short-term securities issued by the National Bank of the Republic of Macedonia, which is sold at a discounted value, and on the day of maturity the issuer pays it's nominal value.

model, which in 2014 was 3.35%,[10]

By getting all the necessary variables and with using the CAPM model the expected rate of return of shares in the MBI-10 is determined (Table 2).

Table 2. Expected rate of return of the common shares included in MBI 10

Company	Rate of return (%)
Granit AD Skopje	0,451675
Alkaloid AD Skopje	1,258552
Komercijalna banka AD Skopje	2,170359
Replek AD Skopje	2,430823
Makpetrol AD Skopje	1,178407
Stopanska banka AD Bitola	2,083445
Makedonski telekom AD Skopje	2,601157
Makedonijaturist AD Skopje	2,121428
Toplifikacija AD Skopje	1,000968

Source: Own calculation

So by determining the rate of return on individual stocks on one side, and beta, on the other side, it would be possible to see what is the relationship between these two variables (see Graph 1).

Graph 1. Relation between expected rate of return and beta

Based on the Graph 1 we can perceive that the Macedonian capital
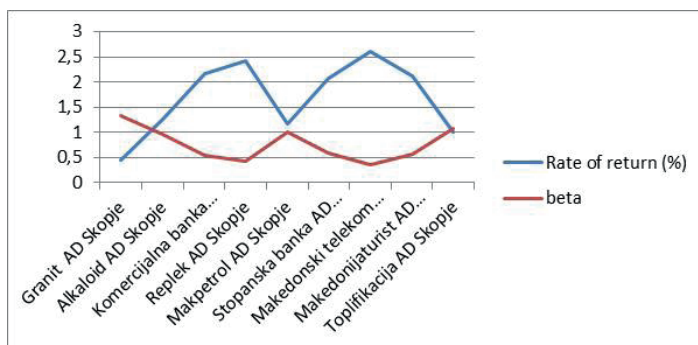
market is not being confirmed by the positive correlation between yield and risk. Namely, those companies that have a higher risk have a lower yield and vice versa. The reason for this is primarily due to the low market rate of return, which is below the risk free rate in Macedonia.

10. www.nbrm.mk

Conclusion

In investment theory and practice the relationship between yield and risk is crucial to making an appropriate decision. The risk of financial assets, primarily of the shares is in the focus of this paper. Beta as a measure of the riskiness of assets is a subject of research of the this article. Moreover, unlike the standard deviation which is a measure of overall risk of the assets, systemic risk is only relevant fore beta (risk which can not be avoided by diversifying the portfolio)**.**

Specifically, the riskness of the Macedonian capital market are determined in the paper, based on the calculation of the beta for the common shares included in market index MBI-10. Given that, the beta is a key variable in the CAPM model, the values obtained for beta allow to calculate the rate of return with the CAPM model, which enables analysis of the relation yield –risk, too. Unlike the usual positive correlation between yield and risk, the Macedonian capital market notes the existence of a reverse relation between yield and risk. Namely, the company, or the share that has the highest beta risk at the same time has the lowest yield. This state of macedonia capital market is due to the lower rate of market returns to risk free rate. This in turn leads to reduced incentive for investment in shares, but imply on investment in other types of securities, such as government securities, treasury bills and other less risky securities, which of course doesn't lead to successful development of the capital market seen in the long term.

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THE NEW AUDIT REPORT SEEN THROUGH THE PRISM OF THE CERTIFIED AUDITORS – RESEARCH IN THE REPUBLIC OF MACEDONIA

Abstract

With recomposing of the audit report, IAASB announce the commencement of the new era in the audit profession. The proposed amendments in ISA 700, 705 and 706, as well as the new ISA 701 are expected to decrease the information gap and in the same time to increase the communication power of the audit report. The revision of the standards related to the audit report and their publication in June 2014 encouraged us to carry out a research that will include the certified auditors in the Republic of Macedonia. The main objective of the research is to realize the perception certified auditors have regarding the new amendments and whether they really expect an increase of the credibility of the audit report in the users' eyes which will decrease the "expectation gap".

Key words: audit report, International standard on auditing, going concern, key audit matters

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Introduction

The current audit report can be categorized as short with strict terminology with limited understanding of non-auditors and non-accountants users as well as offer limited information about the auditor's findings. The new audit report proposed with the latest changes of the International standards on Auditing is expecting to minimize the expectation gaps audit reports' users. The new look of the audit report should meet the users' requirements for obtaining more information tailored to the specific audit of financial statements engagement. The paper is consisted of three parts. The first one is focused on the historical background of the statutory audit in the Republic of Macedonia. The second part defines the objective of the research and related questionnaire development and sample selection. In the third part are summarized the results of the conducted research and based on it are suggested alternative directions for future researches.

1. HISTORICAL BACKGROUND OF STATUTORY AUDITING IN REPUBLIC OF MACEDONIA

In the period 1945-1991, Republic of Macedonia, as an integral part of SFRY, was building a plan economy. At that time, like in the other former socialist countries, audit profession was not developed in the Republic of Macedonia. Following the breakdown of SFRY in 1991, transition period in the Republic of Macedonia was marked with privatization of socially-owned enterprises. Carrying out just privatization was conditioned, among other things, by true and fair presentation of the financial statements. Unfortunately, despite the emphasized need for credibility in the presented statements, in the period 1991-1997, audit profession was in the margins of the transition process. First steps towards creating the necessary climate for establishing the audit profession were undertaken in the post–privatization period by adopting the Auditing Law in December 1997. Signing the Stabilization and Association Agreement (SAA) with the European Union and its Member States on 9 April 2001 confirmed the decisiveness of the Republic of Macedonia to integrate in the European family. Not even the audit profession was resistant to the requirements for harmonization with the Acquis Communautaire. On the contrary, in a relatively short period of time, in September 2005, new Auditing

Law was adopted, fully harmonized with the Revised Eighth Company Law Directive. New Auditing Law introduced essential changes in the audit profession, which were assessed as a step forward in the EU integration processes. One of the changes was related to the introduction of Council for Advancement and Oversight of the Audit (CAOA) into the accounting infrastructure in the Republic of Macedonia. With the amendments of the Audit Law in December 2010, CAOA became regulatory body in the audit profession responsible for licensing certified auditors and audit firms, review of quality control system, review of transparency reports, etc. Paper segments below give more detailed presentation on the trends on the audit services market in the Republic of Macedonia, in the period 2007-2014.

Under the Auditing Law dated 1997, conditions for creating the audit profession, with attributes immanent for the developed market economies, were established for the first time in the Republic of Macedonia. The Law defined for the first time the requirements for registration of audit firms as primary holders of audit activities. At the same time, the Law precisely stated the preliminary criteria to be met by individuals that wanted to become part of the audit profession. What was immanent for the environment in which the Law was adopted was the absence of strong professional association of accountants and auditors that could be the generator of changes. Association of Accountants, Financial Workers and Auditors, having tradition longer than half a century, remained passive at the time the foundations of the profession were laid down. Taking such trends in the accounting profession into account, delicate mission related to the creation of professional regulation in the audit profession under the Law was entrusted to the Ministry of Finance. Having in mind the fact that the Law expressed the commitment to accept and implement the international regulation as a substitute for the national one, in 1998 Ministry of Finance translated the IFAC's International Standards on Auditing. One year later, Ministry of Finance translated IFAC's Code of Ethics for Professional Accountants, which was accepted in the national profession in its original form and contents.

In 2001, Minister of Finance adopted the training program for the potential candidates to pass the exam for acquiring the title of statutory auditor. Ministry of Finance also adopted the Rulebook on the Manner of Passing the Exam for Acquiring the Title of Statutory Auditor by precisely stating the exam criteria under the program. Logical continuation of the undertaken activities was for the Minister of Finance to be assigned the toughest task to appoint the Exam Commission. The first exam for acquiring the professional

title was held in December 2001, organized by the Ministry of Finance. By having two exam cycles annually (in May and December), nine exam cycles were carried out as of December 2005 inclusive, and the initial audit core, comprising 147 statutory auditors, was established. However, despite the generally created climate for introduction of the audit profession in the accounting infrastructure, the Law did not cover all aspects that were crucial for this profession. Part concerning the continuous professional development of individuals who acquired the title of statutory auditor remained fully unregulated. Basically, the Law left series of opened issues, the resolution of which became an imperative in the next several years. Resolving these issues initiated radical changes in the existing Auditing Law, which, after full 7 years, was substituted with a new one in September 2005.

In the meantime, on 9 April 2001, Republic of Macedonia became the first country in the region to sign the Stabilization and Association Agreement (SAA) with the European Union and its Member States. Parliament of the Republic of Macedonia ratified the SAA on 13 April 2001, thus confirming the strategic interest of the Republic of Macedonia and the political commitment for integration in the European structures. Article 68 of SAA clearly includes the obligations for harmonizing the national legislation with the Acquis Communautaire, creating own experience and guidelines in this process. On 9 November 2005, the country was delivered positive *Avis* for the status of a candidate country, with detailed standards to be met.

The *Avis* clearly pointed out the need for the candidate country to meet the EU criteria, among which was the acceptance of 31 Chapters of the Acquis Communautaire. Adoption and implementation of the relevant components in Chapter 5 (Company Law) of the Acquis Communautaire pertaining to accounting and audit is the key part of all the activities envisaged in the Country Action Plan adopted in June 2005 by the Steering Committee appointed by the Government. In line with the commenced EU integration processes, enforcement of the new Auditing Law was to provide for a significant improvement of audit quality, as well as commencement of the process of approximation of the audit profession in the Republic of Macedonia to the European family.

Having in mind the fact that in the past period the term "self-regulation" was unknown, primary task of the new Auditing Law was commencement of the process of deregulation of the audit profession. Deregulation was to contribute to transfer of the competences in the field of creating the professional regulation and certifying the statutory auditors from

the Ministry of Finance to the Institute for Certified Auditors established under this Law. More specifically, the Law envisages establishment of a professional association of statutory auditors with a wide range of obligations and responsibilities, having all statutory auditors and audit firms as its members. Assembly for the incorporation of the Institute for Certified Auditors of the Republic of Macedonia (hereinafter: ICARM) was held on 23 May 2006.

Establishment of ICARM has opened new horizons for the statutory auditors in the Republic of Macedonia. In fact, establishment of ICARM caused avalanche of changes in the audit profession, in particular in the field of assessment of the quality of work of the statutory auditors and the audit firms, changes in the exam program for acquiring the title of statutory auditor, introduction of continuous professional development of statutory auditors, defining the requirement for the audit firms to present transparency report on annual basis, etc. Process of professional training and certification of statutory auditors by ICARM commenced in the course of 2009. In addition, training within the continuous professional development of statutory auditors was carried out for the first time in 2009, and thorough preparations were made for introduction of quality control over the operations of audit firms and statutory auditors. The first exam for certified auditors organised by ICARM took place in May 2010 and in a twice a year cycle, it has been conducted successfully up until now. In the meantime, in November 2013, the ICARM became a full member of IFAC.

In the spirit of the current requirements for public oversight of the audit profession in December 2005 the Council for Advancement and Oversight of the Audit (hereinafter: CAOA) has been formed according criteria defined with article 7 from the Law and article 31 from the new Eighth Directive. ICARM, all audit companies and certified auditors - sole proprietors are subject to oversight carried out by the CAOA of the Republic of Macedonia. With the amendments in the Audit Law of December 2010, CAOA gained a status of a regulatory body responsible for licensing certified auditors and audit firms, review of quality control system, review of transparency reports, etc. In fact, for the purpose of advancement and oversight of auditing, the Government of the Republic of Macedonia, upon proposal by the Minister of Finance shall establish the CAOA, as an independent regulatory body, with public authorizations as prescribed by Audit law. The CAOA shall acquire status of legal entity with registration with the Registry of other legal entities, kept in the Central Registry of the Republic of Macedonia. The Council shall be responsible for its operation to the Government of the

Republic of Macedonia. The Council shall be composed of seven members. The Government of the Republic of Macedonia shall appoint the Chairperson and the members of the Council. The Chairperson of the Council shall be proposed by the Minister of Finance, and the other six members shall be proposed by the following institutions:

- One representative from the National Bank of the Republic of Macedonia employed in the Supervision Department of NBRM,
- One representative from the Insurance Supervision Agency,
- One representative from the Securities Commission,
- One representative from the major business entities, and
- Two certified auditors nominated by the ICARM. (Assembly of the Republic of Macedonia, 2010)

With a time gap of one year, the Council was constituted in January 2012. During 2012, the Council was working on establishing its own architecture drafting the constitutional acts and was not able to commence the process of licensing the statutory auditors and the audit firms. Because of that, the audit firms and statutory auditors – sole proprietors existed on the market without having working licenses. Licences issuance was one of the priority tasks envisaged in the Council's Annual Programme for 2013.

According to Article 8 of the Audit Law, in March 2013 the CAOA commenced the process of licensing certified auditors, audit firms and certified auditors – sole proprietors. By October 2014 inclusive, according to the ICARM Register, the audit profession in the Republic of Macedonia is consisted of 180 licensed certified auditors, 26 licensed audit firms and 11 licensed certified auditors – sole proprietors. Regardless of the fact that it is a matter of a small-scale profession, compared to the other EU Member States, we consider that conducted research will send the message to the licensed auditors in the Republic of Macedonia and their perception on the improvements of the audit report suggested by IAASB.

2. **OBJECTIVES OF THE RESEARCH AND A QUESTIONNAIRE DEVELOPMENT**

On 25 July 2013, the International Auditing and Assurance Standards Board (hereinafter: IAASB) issued new and revised International

Standards on Auditing (hereinafter: ISAs) to implement improved auditor reporting. To the proposed amendments preceded the publication of IAASB Consultation Paper: Enhancing the Value of Auditor Reporting: Exploring Options for Change (issued May 2011) along with the replies from 139 relevant professional associations and authorities all around the world. For the purpose of this paper we reviewed the discussion document as well as part of the replies that helped us to locate the key issues which reinforced the debate in the audit profession.

When creating the questionnaire also helped us The European Federation of Accountants and Auditors for SMEs ("EFAA") Survey on IAASB Auditor Reporting Standards Proposals from March 2014. We also took into consideration the research by KPMG titled Audit Committees' and auditors' reports – A survey of December year – ends under the new reporting May 2014.

From the point of view of the proposed improvements in the standard report and inclusion of an open reporting form, we found useful the information from the researches made by Maastricht Accounting, Auditing and Information Management Research Center (MARC) titled A Framework for Extended Audit Reporting from 1 July 2011 and The Value of Audit from 1 March 2010.

As previously stated, the audit profession in the Republic of Macedonia is consisted of 180 licensed certified auditors, members of ICARM. On the audit market there were 26 audit firms out of which the Big Four, audit firms that are part of the international network (BDO, Grant Thornton, Moore Stephens, Bakker Tilly International) and local audit firms, that due to great fluctuations absorbed at most 80 licensed auditors. The remainder of certified auditors work in the internal audit departments in the banks, internal audits in corporate sector, public sector, academic environment and other working posts.

Our research was based on three main objectives:

- All licensed certified auditors to get acquainted with the current amendments in the profess bsional regulation, regardless if they are practitioners or auditors in other institutions.

- To explore their views on the issue if the recomposed report will add higher value for the decision making process of the users (especially the additional information related to the requirement for disclosure of key audit issues).

- To see their perception regarding the issue if the changes in the audit report would influence on improvement of the audit quality.

When creating the questionnaire we started from the key aspects of ISA 700 Forming an Opinion and Reporting on Financial Statements and ISA 701 Communicating Key Audit Matters in the Independent Auditor's Report taking into account that it is a matter of regulation published in June 2014 and the short time for the research.

In the introducing part we stated the fact that the most significant changes aim to increase the transparency in the audit process and to offer an understanding of the auditor's professional judgment by reporting for "key audit matters". The greatest benefit of the initiated amendments of the form and content of the audit report are expected to have the investors, creditors, shareholders, analysts and other users of the audit report. IAASB believes that the re-composition of the audit report will have a positive impact on the financial reporting. Finally, the new look of the audit report should add value to the audit. Our research has been inspired by the initiated amendments of the ISA 700 and is focused on the amendments that are mandatory for ALL audit reports, as well as to the ones in which it is left to the auditor to decide on offering more information.

In continuance of the questionnaire we introduced to the auditors the new schedule of the elements of the report for forming opinion and reporting on financial reports. Namely, according to the suggested ISA 700 the elements in the audit report are scheduled as follows:

- Title
- Addressee
- Auditor's Opinion
- Basis for Opinion
- Going Concern
- Key Audit Matters
- Other Information
- Responsibilities for the Financial Statements
- Auditor's Responsibilities for the Audit of the Financial Statements
- Other Reporting Responsibilities
- Name of the Engagement Partner
- Signature of the Auditor
- Date of the Auditor's Report (IFAC, 2014)

Because of the anonymity of the research when constructing the questions we started with identification of the company where the respondent works, more precisely if he/ she is a certified auditor active in practice or works on other working tasks and if so, in what kind of institution and on what kind of engagement.

Due to the fact that the most important amendment (amongst others) is the new paragraph for going concern whereas the paragraph for key audit matters is mandatory only for public interest entities, part of the questions are related to these amendments. We asked for an opinion as well on the statement of the auditor for independence that should identify the relevant ethical requirements and on the additional statement that should be related to whether the auditor has fulfilled relevant responsibilities required by the Code of Ethics. For us it was especially important to hear the voice of the profession regarding the requirement for disclosure of the name of the engagement partner. Finally after all the questions related to the initiated amendments in the report, we asked the respondents to state whether the new requirements increase the communication value of the report, whether they are in favor to a more detailed information for the reader, whether they improve the audit quality, whether they influence on the increased time for its writing and finally whether it will increase the price of the audit service. For more detailed information on the contents of ISA 700 and ISA 701, the respondents were directed to the relevant websites. After certain key questions, the respondents were left an alternative to present more detailed information if they can. At the same time, the respondents were encouraged to emphasize their personal perceptions and attitudes towards the separate questions. The integral text of the questionnaire is given in attachment to the paper.

3. RESEARCH APPROACH TO ANALYZING RESPONSES AND RESULTS

As it is stated earlier in the study, the main purpose of the study is to provide empirical evidence on certified auditors' perceptions about latest proposed ISA 700. Some of the questions in web based questionnaire were adapted from European Federation of Accountants and Auditors Survey and was send to 172 certified auditors in the Republic of Macedonia. Participants received an invitation email that provided a link to the survey.

After second reminding by email 63 responses are received, or 36,6 response rate. Certified auditors are coded and categorized according to their current practical experience and place of work as auditors in "Big Four" (12), other international audit group (17), local audit firms (11), external auditors who work individually (3) and other (banks, insurance companies, consultancy firms, university, public companies) (20). The survey was intended to take no more than 10 minutes. Most of the questions (except introductory and preliminary questions) were answered on Likert scale from 1 to 5 where 1 is totally disagree and 5 is totally agree. Introductory and preliminary questions include where the certified auditors work (1 and 2 questions) and which services they are providing (3 question) in order to research the differences in views, for example, certified auditors in audit practice and certified auditors engaged in other activities (internal audit, bookkeeping, education etc.).

It is important to mention the results of the forth question – "As certified auditor do you agree that current standardized report is enough informative for the end users?". 42% of the certified auditors who are not engaged to practice external audit consider that the standardized current report is enough informative, and only 26% consider that it is not enough informative, and the remain respondents are uncertain. The situation with certified auditors engaged in audit practice is quite different – only 34% consider the current statement as informative, while 43% consider the current statement as non-informative, and the remain are uncertain. It is important to mention that majority of certified auditors working for "Big fours's" (62%) consider the standardized current statement as enough informative and only 23% consider it as not enough informative.

Beside these question, 20 more questions were asked with responses on the Likert scale from 1 to 5 where 1 is fully disagree and 5 is fully agree. These questions are given in the Table 1 and in further analysis for the process simplification only the number of the question is given.

Num.	Question	N	Min	Max	Sum	Mean	Std. Dev.
5	The initiative of the International Auditing and Assurance Standards Board (IAASB) about recomposing standard report will meet the expectations of the investors, shareholders, creditors and other users of the audit report in the RM.	63	1	5	220	3.49	.821
6	The open form of the audit report with more information related with the audit process will enable tightening of expectation gap.	63	2	5	230	3.65	.826

7	Standardized information (for example, paragraphs with auditors' and managers' responsibilities) should remain in the auditor's report.	63	1	5	288	4.57	.797
8	Standardized information (for example, paragraphs with auditors' and managers' responsibilities) should be relocated to the client's website?	63	1	5	127	2.02	1.225
9	Standardized information (for example, paragraphs with auditors' and managers' responsibilities) should be relocated to the appendix of the auditor's report?	63	1	5	130	2.06	1.268
10	The new layout of auditors report elements contribute to greater visual clarity.	63	1	5	230	3.65	.806
11	Relocation of the paragraph with the expressed opinion at the beginning of the report will increase its informative and communicative value.	63	1	5	223	3.54	1.175
12	The paragraph with explanation of the basis about expressed opinion which follow the paragraph with expressed opinion increases its informative power and offer more information about auditor's professional judgment in choosing the form of expressed opinion.	63	1	5	249	3.95	1.023
13	With more extensive explanation of auditor's independence, the perception of the report users about consistency on the auditor with the IFAC Code of Ethics is improved.	63	1	5	246	3.90	.979
14	What is your opinion about requirement of the proposed ISA 700 that auditors should make an explicit statement on going concern even where there is no problem with going concern?	63	1	5	225	3.57	1.228
15	Losing the emphasis of matter paragraph option for problematic going concern as it would be reported as part of the going concern section.	63	1	5	239	3.79	1.138
16	As certified auditors what is your opinion about the responsibility of disclosure of key audit matters, in separate paragraph, only to be mandatory for listed entities?	63	1	5	213	3.38	1.288
17	In case the requirement for disclosure of key audit matter to do not be mandatory only for listed entities, do you agree that would be useful the same paragraph to be part of the auditor's report for big non-listed entities?	63	1	5	246	3.90	1.214
18	In case the requirement for disclosure of key audit matter to do not be mandatory only for listed entities, do you agree that would be useful the same paragraph to be part of the auditor's report for small and medium entities?	63	1	5	210	3.33	1.426

19	Reporting significant risk to those charged with governance at the planning stage of the audit in accordance with the new requirements of ISA 700 is practical challenges for auditors.	63	1	5	238	3.78	.941
20	Greater audit transparency in accordance with ISA 700 and ISA 701 will improve communicative value of the auditor's report.	63	1	5	248	3.94	.931
21	Greater attention which is required from the management and those responsible for disclosure governance in the financial statements which revoke the auditor in his statement (for example, key audit matter, going concern) will contribute for increased quality of the financial reporting.	63	2	5	267	4.24	.837
22	Replacement the focus of the auditor's attention about the matters he report, indirectly will increase auditor's professional skepticism what will lead to improved audit quality.	63	1	5	236	3.75	1.077
23	The new requirements of ISA 700 and ISA 701 will absorb more auditor's time in the stage of preparing and writing report?	63	2	5	263	4.17	.925
24	The new requirements of ISA 700 and ISA 701 will increase the fee for financial statements audit.	63	1	5	206	3.27	1.125

Table 1 Descriptive statistics of the responses

	1*	2*	3*	4*	5*	Total
5. The iniciative of the International Auditing and Assurance Standards Board (IAASB) about recomposing standard report will meet the expectations of the investors, shareholders, creditors and other users of the audit report in the Republic of Macedonia.	1 (1,6%)	2 (3,2%)	33 (52,4%)	19 (30,2%)	8 (12,7%)	63 (100,0)
6. The open form of the audit report with more information related with the audit process will enable tightening of expectation gap.	0 (0%)	5 (7,9%)	21 (33,3%)	28 (44,4%)	9 (14,3%)	63 (100,0)
7. Standardized information (for expample, paragraphs with auditors' and managers' responsibilities) should remain in the auditor's report.	1 (1,6%)	1 (1,6%)	3 (4,8%)	14 (22,2%)	44 (69,8%)	63 (100,0)
8.Standardized information (for example, paragraphs with auditors' and managers' responsibilities) should be relocated to the client's website?	29 (46,0%)	16 (25,4%)	11 (17,5%)	2 (3,2%)	5 (7,9%)	63 (100,0)

9.Standardized information (for example, paragraphs with auditors' and managers' responsibilities) should be relocated to the appendix of the auditor's report?	30 (47,6%)	13 (20,6%)	10 (15,9%)	6 (9,5%)	4 (6,3%)	63 (100,0)
10. The new layout of auditors report elements contribute to greater visual clarity.	1 (1,6%)	3 (4,8%)	20 (31,7%)	32 (50,8%)	7 (11,1%)	63 (100,0)
11. Relocation of the paragraph with the expressed opinion at the beginning of the report will increase its informative and communicative value.	6 (9,5%)	6 (9,5%)	10 (15,9%)	30 (47,6%)	11 (17,5%)	63 (100,0)
12. The paragraph with explanation of the basis about expressed opinion which follow the paragraph with expressed opinion increases its informative power and offer more information about auditor's professional judgment in choosing the form of expressed opinion.	3 (4,8%)	2 (3,2%)	10 (15,9%)	28 (44,4%)	20 (31,7%)	63 (100,0)
13. With more extensive explanation of auditor's independence, the perception of the report users about consistency on the auditor with the IFAC Code of Ethics is improved.	2 (3,2%)	3 (4,8%)	12 (19,0%)	28 (44,4%)	18 (28,6%)	63 (100,0)
14. What is your opinion about requirement of the proposed ISA 700 that auditors should make an explicit statement on going concern even where there is no problem with going concern?	5 (7,9%)	7 (11,1%)	15 (23,8%)	19 (30,2%)	17 (27,0%)	63 (100,0)
15. Losing the emphasis of matter paragraph option for problematic going concern as it would be reported as part of the going concern section.	3 (4,8%)	7 (11,1%)	9 (14,3%)	25 (39,7%)	19 (30,2%)	63 (100,0)
16. As certified auditors what is your opinion about the responsibility of desclosure of key audit matters, in separate paragraph, only to be mandatory for listed entities?	7 (11,1%)	8 (12,7%)	17 (27,0%)	16 (25,4%)	15 (23,8%)	63 (100,0)
17. In case the requirement for disclosure of key audit matter to do not be mandatory only for listed entities, do you agree that would be useful the same paragraph to be part of the auditor's report for big non-listed entities?	5 (7,9%)	4 (6,3%)	7 (11,1%)	23 (36,5%)	24 (38,1%)	63 (100,0)

18. In case the requirement for disclosure of key audit matter to do not be mandatory only for listed entities, do you agree that would be useful the same paragraph to be part of the auditor's report for small and medium entities?	11 (17,5%)	6 (9,5%)	14 (22,2%)	15 (23,8%)	17 (27,0%)	63 (100,0)
19. Reporting significant risk to those charged with governance at the planning stage of the audit in accordance with the new requirements of ISA 700 is practical challenges for auditors.	1 (1,6%)	1 (1,6%)	27 (42,9%)	16 (25,4%)	18 (28,6%)	63 (100,0)
20. Greater audit transparency in accordance with ISA 700 and ISA 701 will improve communicative value of the auditor's report.	2 (3,2%)	1 (1,6%)	14 (22,2%)	28 (44,4%)	18 (28,6%)	63 (100,0)
21. Greater attention which is required from the management and those responsible for disclosure governance in the financial statements which revoke the auditor in his statement (for example, key audit matter, going concern) will contribute for increased quality of the financial reporting.	0 (0%)	3 (4,8%)	7 (11,1%)	25 (39,7%)	28 (44,4%)	63 (100,0)
22. Replacement the focus of the auditor's attention about the matters he report, indirectly will increase auditor's professional skepticism what will lead to improved audit quality.	4 (6,3%)	3 (4,8%)	13 (20,6%)	28 (44,4%)	15 (23,8%)	63 (100,0)
23. The new requirements of ISA 700 and ISA 701 will absorb more auditor's time in the stage of preparing and writing report?	0(0%)	3 (4,8%)	13 (20,6%)	17 (27,0%)	30 (47,6%)	63 (100,0)
24. The new requirements of ISA 700 and ISA 701 will increase the fee for financial statements audit.	6 (9,5%)	6 (9,5%)	25 (39,7%)	17 (27,0%)	9 (14,3%)	63 (100,0)

* 1 = Totally disagree; 2 = Disagree; 3 = Uncertain; 4 = Agree; 5 = Totally agree

Table 2 Descriptive statistics about frequencies of each question

Meeting expectations of stakeholders

Regarding Question 5 about meeting the expectations of the investors, shareholders, creditors and other users of the audit report in the Republic of Macedonia, 42,9% agree or totally agree that the initiative of IAASB will

meet the stakeholders' expectations. The mean response for this question is 3,49. Post hoc comparisons using Scheffe's test show that certified auditors engaged in practice other than external audit (mean = 3,85) strongly believe that the IAASB's initiative will meet the stakeholders' expectations than external auditors engaged in big four audit firms (mean = 3,0) with significance of p = 0,075.

Question 6 regarding closing the expectation gap with mean of 3,65. 58,7% of respondents agree or fully agree that the open form of the audit report with more information related with the audit process will enable closing of expectation gap.

Standardized report

There were three questions about the location of the standardized information regarding auditors and management responsibilities. The question 7 that standardized information should remain in the auditor's report has mean of 4,57 which indicate that almost all responders fully agree that these information should remain in the auditor's report and do not have to be relocated to the company's web page and auditor's report appendix (with mean 2,02 and 2,06 respectively). 92% of responders agree with these statement.

Improving visual clarity of auditor's report

Question 10 regarding that the new layout of auditors report elements will contribute to greater visual clarity has a mean of 3,65 or 69,1% agree or fully agree with this statement.

Question 11 about relocation of the paragraph with the expressed opinion at the beginning of the report will increase its informative and communicative value has a mean of 3,54 and 65,1% agree or fully agree responses. What is important to mention about this question is the significant difference between group (p = 0,000) and the auditors engaged in practice other than audit (mean = 4,05), individual auditors (mean = 5) and auditors engaged in local audit firms (mean = 4) agree more with this statement in comparison with auditors engaged in international audit firms – big four (mean = 3) and other (mean = 2, 76).

Question 12 about the paragraph with explanation of the basis about expressed opinion which follow the paragraph with expressed opinion increases its informative power and offer more information about auditor's professional judgment in choosing the form of expressed opinion has mean of 3,95 and 76,1% of agreement or fully agreement with this statement. There is no significant differences between the group.

Statement of independence

The question (13) was structured as a way that the independence paragraph will improve the user's perception about compliance of auditor's report with code of ethics. The mean of this question is 3,9 with 73% responses of agree and fully agree, and only 8% answered with do not agree and fully disagree. There is no significant differences between groups. This is indication that the paragraph for independence increase the perception of performing audit in accordance with IFAC Code of Ethics.

Going concern paragraph

Question 14 and 15 related with going concern paragraph have means of 3,57 and 3,79 respectively. There is also significant difference (p = 0,001) of means between groups. For question 14, auditor engaged in big four, other international audit group and individual auditors agree less than auditors engaged in local audit firms and auditors engaged in practice other than audit that there should be a mandatory paragraph for going concern even when there is no problems with going concern matters.

Key audit matters

Questions 16, 17 and 18 are related with including key audit matters in separate paragraph and it to be mandatory for listed companies (question 16), big non-listed companies (question 17) and small and medium companies (question 18) with means of 3,38, 3,90 and 3,33 respectively. For question 16 there is no significant difference between groups. For question 17 it is important to emphasis that the responses from auditors engaged in practice other than auditing (banks, listed companies, education, insurance) has mean

of 4,5 and almost fully agree about this statement. The similar situation could be seen in question 18 where auditors engaged in practice other than auditing agree about including the paragraph with key audit matters in reports for small and medium firms, mostly because these auditors work in such companies. The Question 19 about reporting significant risk to those charged

Groups		Questions									
		5	6	7	8	9	10	11	12	13	14
Big Four	N	12	12	12	12	12	12	12	12	12	12
	Mean	3.00a	3.33	4.83	1.83	2.00	3.08	3.00	3.42	3.83	3.25
	Std. Deviation	.426	.651	.389	1.267	1.477	.900	1.279	1.240	.835	1.288
	% of Total N	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%
Other International Audit Group	N	17	17	17	17	17	17	17	17	17	17
	Mean	3.29	3.53	4.71	1.76	1.76	3.65	2.76	3.76	3.65	2.94
	Std. Deviation	1.047	1.007	.470	1.200	1.300	.786	1.251	1.348	1.222	1.197
	% of Total N	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%
Local audit firms	N	11	11	11	11	11	11	11	11	11	11
	Mean	3.73	4.09	4.45	1.91	2.09	3.73	4.00	4.00	4.18	3.73
	Std. Deviation	.467	.539	1.214	1.221	1.221	.786	.775	.447	.751	1.104
	% of Total N	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%
Individual Auditors	N	3	3	3	3	3	3	3	3	3	3
	Mean	3.33	3.00	5.00	3.00	2.67	4.33	5.00	4.67	3.33	2.33
	Std. Deviation	.577	1.000	0.000	2.000	2.082	1.155	0.000	.577	2.082	1.155
	% of Total N	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%

Other	N	20	20	20	20	20	20	20	20	20	20
	Mean	3.85a	3.80	4.30	2.25	2.25	3.85	4.05	4.30	4.10	4.40
	Std. Deviation	.813	.768	.923	1.118	1.070	.587	.686	.657	.718	.754
	% of Total N	31.7%	31.7%	31.7%	31.7%	31.7%	31.7%	31.7%	31.7%	31.7%	31.7%
Total	N	63	63	63	63	63	63	63	63	63	63
	Mean	3.49	3.65	4.57	2.02	2.06	3.65	3.54	3.95	3.90	3.57
	Std. Deviation	.821	.826	.797	1.225	1.268	.806	1.175	1.023	.979	1.228
	% of Total N	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Between groups (F-ratio)		2,830**	2,079***	1,327	0,929	0,506	2,595**	6,909*	2,045***	0,984	5,768*
*, ** and *** denote significance at the 0,01, 0,05 and 0,1 respectively											

Table 3 Analysis of the variance based on different groups of certified auditors engaged in different practice

Groups		15	16	17	18	20	21	22	23	24	25
Big Four	N	12	12	12	12	12	12	12	12	12	12
	Mean	3.75	3.42	3.33	2.58	4.08	3.75	3.83	3.42	4.50	3.58
	Std. Deviation	1.055	1.443	1.557	1.443	.900	.965	1.193	1.084	.674	1.240
	% of Total N	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%
Other Inetrna-tional Audit Group	N	17	17	17	17	17	17	17	17	17	17
	Mean	3.29	3.12	4.00	3.53	3.41	3.71	4.12	3.41	4.29	2.76
	Std. Deviation	1.404	1.495	1.118	1.375	1.004	.985	.928	1.326	.920	1.300
	% of Total N	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%
Local audit firms	N	11	11	11	11	11	11	11	11	11	11
	Mean	3.36	3.73	3.55	2.91	3.55	4.09	4.18	4.18	4.09	3.45
	Std. Deviation	1.027	1.191	1.293	1.514	.934	.701	.603	.751	1.044	1.036
	% of Total N	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%
Indi-vidual Auditors	N	3	3	3	3	3	3	3	3	3	3
	Mean	4.00	3.67	3.00	2.33	3.67	3.33	4.67	2.33	3.67	2.33
	Std. Deviation	1.000	1.528	2.000	2.309	1.155	2.082	.577	1.155	1.155	1.155
	% of Total N	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%
Other	N	20	20	20	20	20	20	20	20	20	20
	Mean	4.45	3.35	4.50	4.00	4.05	4.25	4.55	4.20	4.00	3.55
	Std. Deviation	.686	1.089	.513	.973	.826	.716	.510	.616	.973	.759
	% of Total N	31.7%	31.7%	31.7%	31.7%	31.7%	31.7%	31.7%	31.7%	31.7%	31.7%
Total	N	63	63	63	63	63	63	63	63	63	63
	Mean	3.79	3.38	3.90	3.33	3.78	3.94	4.24	3.75	4.17	3.27
	Std. Deviation	1.138	1.288	1.214	1.426	.941	.931	.837	1.077	.925	1.125
	% of Total N	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Between groups		3,342**	0,402	2,854**	2,945**	1,618	1,370	1,778	3,494*	0,861	2,142***
*, ** and *** denote significance at the 0,01, 0,05 and 0,1 respectively											

Table 3 (continue) Analysis of the variance based on different groups of certified auditors engaged in different practice

with governance at the planning stage of the audit in accordance with the new requirements of ISA 700 is practical challenges for auditors has mean of 3,78 with 54% responses for agree or fully agree and 42,9% uncertain responses.

Auditor's report and financial statements quality

Question 20 is about improving communicative value of the auditor's report through greater audit transparency in accordance with ISA 700 and ISA 701 has mean of 3,94 and 73% response with agree or fully agree and only 4,8% disagree or fully disagree. There is no significant difference between groups.

Question 21 about greater attention on that matters that auditors use in their work will increase the quality of financial reporting has mean of 4,24 and no significant difference between groups what means that almost all certified auditors believe that open and wide auditor's report will contribute to better financial reporting.

Question 22 indicate that the audit quality will be increased by replacement of the focus of auditor's attention (68,2%).

Auditor's time and fee

Almost all auditors agree that the new requirements according to the new proposed ISA 700 will require more auditor's time (mean = 4,19) and there is no difference between groups but it will not necessarily lead to increased audit fee with mean of 3,27 and 39,7% uncertain answers. There is significant difference between group with p = 0,087 but the difference comes from the group of individual auditors who are only 3 and who believe that the audit fee should be increased.

Conclusion

After different periods and stages of developing audit profession in the Republic of Macedonia, there is well developed and self-regulated

audit profession with 180 certified auditors and presence of most important international audit networks. These certified auditors were included in this research in order to assess their perception about the changes in the new ISA 700. In the study were included all certified auditors regardless of the type of their engagements and even more with ANOVA approach the difference between groups was tested. First of all, kind of surprisingly results were that certified auditors in Big Four and auditors engaged in the practice other than auditing answer that they consider the current standardized audit report as enough informative (62% and 42%).

It is important to emphasis that, in general, certified auditors answer positively on the changes in the proposed ISA 700. It means that the new form of the audit report will meet the stakeholders' expectations and will contribute to closing expectation gap. Also there is a high agreement that standardized information about auditor's and management responsibilities should remain in the auditor's report. Certified auditors are uniform about improving the visual clarity of the auditor's report as well as that paragraph with explanation of the basis about expressed opinion which follow the paragraph with expressed opinion increases its informative power and offer more information about auditor's professional judgment in choosing the form of expressed opinion.

73% of certified auditors agree or fully agree that the independence paragraph will improve the user's perception about compliance of auditor's report with code of ethics, i.e. that audit is performed in accordance with IFAC Code of Ethics.

Auditors engaged in big four, other international audit group and individual auditors agree less than auditors engaged in local audit firms and auditors engaged in practice other than audit that there should be a mandatory paragraph for going concern even when there is no problems with going concern matters.

The paragraph with key audit matters is required to be mandatory not only for the listed companies, but also for the big non-listed companies and small and medium entities and this is mostly supported by the certified auditors engaged in the practice other than auditing.

Also it is indicated that the proposed changes will lead to improving the quality of financial reporting as well as audit quality through improving communicative value of the audit report.

Certified auditors are uniform about expressing their concern about the quantity of time they will need for performing audit under the proposed changes, but they are skeptical that such changes and increased requirements will lead to increasing of audit fee.

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NATASHA DANILOSKA[1]

CONCEPT OF VALUE-ADDED IN AGRICULTURE AS A RESPONSE TO COMPETITIVE MARKETPLACE

Abstract

Value added is a key indicator to understanding the contribution of the primary inputs, economy of scale, and technical change in the production process. This indicator is a difference between the value of output and the costs of intermediate inputs or intermediate consumption. Value added data can be used in monitoring and evaluating the performance of agricultural holdings, farms and agribusinesses and provides a measurement rod for measuring their economic contribution to the national economy. Namely, this indicator is useful for assessing the productivity of different input and hence for improving the efficiency. When aggregated over all sectors and industries in a certain national economy, value added is equal to gross national product and therefore equal to gross national expenditure.

For agricultural producers and agribusinesses, value-added has of a particular importance because it offers a strategy for transforming an unprofitable enterprise into a profitable one.

Main intention of this paper is to bring some clarity to the value-added concept in agriculture and promote it as a strategy for successful operation of agricultural producers (agribusinesses).

Key words: agriculture, value-added, agribusiness

JEL classification: Q10, Q12, Q13

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Introduction

Value added is a term frequently mentioned when discussing the future profitability of agriculture. It gains popularity mostly during the 1990s and in the economic literature agricultural value-added initiatives have been identified as a means to help agricultural producers absorb the shocks brought about by globalization.[2] In the era of globalization with considerably increased competition in agricultural sector and the rapid commoditization of its products, pursuit of agricultural value-added initiatives, then, may be seen as a strategic response to these circumstances. Of course, these trends themselves have been vastly boosted from various trade liberalization agreements involving the United States, such as the Canada-US Trade Agreement, NAFTA and the WTO.[3] Other factors influencing this situation include increasing consumer demand for convenient, ready-to-eat/cook, safe and nutritious food products and their willingness to pay premiums for such service-embedded products.[4] Although interest in value-added agriculture has been increasing, it is a concept that is poorly understood by many producers and policy makers. The concept has in recent years been used as a mean for justifying improvements in almost anything, starting from value-added accounting[5] to value-added public relations[6]. Thus, value-added branding, for example, is conceived of to be superior to plain branding.[7] Yet, it must be outlined that the argument of how and how much better "value-added" makes any activity it qualifies has not been profoundly discussed in the literature. Thus, value-added agriculture is considered as a superior form of agriculture but there has still not been brought precise frame and measure the implied superiority.

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[2] Coltrain, D., D. Barton and M. Boland: Value-Added: Opportunities and Strategies; Arthur Capper Cooperative Center, Department of Agricultural Economics, Cooperative Extension Service, Kansas State University, 2000, pp. 5-9.

[3] Amanor-Boadu, V.: Trade Liberalization and the WTO Negotiations after Seattle, Guelph: George Morris Centre, March 2000, p.12.

[4] Kent Wolfe: Getting a Food Product to Retail, the University of Tennessee Agricultural Development Center, and ADC Info. No. 40, July 1999, pp. 52-55.

[5] Calhoun, C.H., M.E. Oliverio and P. Wolitzer.: Ethics and the CPA: building trust and value-added service; New York: John Wiley, 1999, p. 11.

[6] Harris, T.: Value-Added Public Relations: The Secret Weapon of Integrated Marketing; Lincolnwood, IL: NTC Business Books, 1998, pp. 98-102.

[7] Nilson, T.H.: Competitive Branding: Winning in the Marketplace with Value-Added Brands; New York: John Wiley & sons, 1998, pp. 42-48.

This paper describes what value-added in agriculture means, why adding value is important, and how producers might add value to their products.

1. THE CONCEPT OF VALUE-ADDING IN AGRICULTURE

Today's agro-food system extends well beyond the farm gate to include manufacturers of farm inputs (such as fertilizer and tractors), food processors, transporters, wholesalers and retailers of food and other farm products. The producers' share of total agro-food economic activity has fallen over the years with continued industrialization, new technology, and consumer demands for more varied and convenient products. The agro-food system as a whole, however, remains a significant force in the economy.

As the complexity of the agro-food system has grown, agricultural producers, agribusiness firms and policymakers have turned to the concept of value added to assess the role of agriculture in a modern economy. Value added provides a measuring rod for measuring economic contribution. Value added data can be used in monitoring and evaluating the performance of companies or industries, and hence for improving their efficiency. Value added is similarly useful for assessing the productivity of different inputs.

At the level of entire economy, value added can be an important policymaking tool. It can contribute in the allocation of resources among user groups when determining the appropriate level of economic development, discussing issues on the promotion of export or evaluating the impact of different options to expand a primary sector. But there is often confusion, and sometimes misunderstanding, about what "value added" really means.

Value added as an economic accounting concept is used to trace the final value of goods and services purchased by consumers back through the economy to the points where the value was created. Thus, the value-added approach can identify sources of economic well-being and accounts for sources of income by tracing payments for the final goods and services. Value added places the cost of producing goods and services in perspective by comparing the cost to what is received for that cost.

In a productive activity, value is ultimately created using primary inputs, also called factors of production. These are commonly grouped into four categories:[8]

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[8] Rob Holland and Kent Wolfe: Considerations for a Value-Added Agribusiness; Agricultural Extension Service, the University of Tennessee, 2010, p.21.

- land and other natural resources such as water,
- labor of workers,
- capital, such as machinery and buildings,
- management and entrepreneurship.

Land, labor, capital and management are the fundamental sources of economic value.

Primary industries such as agriculture and mining create value from natural resources. In a few instances, the primary products created are sold directly to final consumers as primary products, or to another industry as raw materials. The second industry uses factors of production plus other purchased inputs to add value to the raw materials. This creates a final product for consumers, or an intermediate product for a third industry. There may be several more intermediaries before the product reaches the final consumer. Each adds value by combining factors of production with intermediate products or raw materials. The relationships between an industry and its suppliers (usually purchases by the industry) are called backward linkages. Relationships with buyers (usually industry sales) are forward linkages.

Thus, in a modern economy, a typical product passes through several value-adding activities before reaching the final consumer. There are five general ways by which value may be added. Value is added by physically changing the form of raw materials or intermediate products. Butchering beef and milling wheat into flour are examples. Location and time values are added by transporting and storing goods so that they will be conveniently available for consumer purchase. Possession value is added by wholesalers, retailers, and others who facilitate trade. Activities here include credit, insurance, and the transfer of ownership rights. Finally, value is added by providing information about products. Advertising and promotion, grades and standards, trademarks, and labels are typical examples.

The value added to the economy by the agro-food system can be measured in many different ways, but the two basic measures are gross value added and net value added.

Gross value added recognizes that each step adds value as agro-food products move forward through the marketing chain. The cost of agro-food (raw or intermediate) products is subtracted from sales to avoid double-counting the value added earlier by other agro-food businesses.

An agricultural producer or an agro-food business usually must use inputs from industries that are not part of the system. Fuel, packaging, electricity, office supplies, and legal services are some examples. Since the cost of these goods and services was not subtracted, a portion of an agro-food gross value added is actually contributed by other sectors of the economy. This outside value added can be deducted to get net value added in the agro-food system.

Since net value added deducts the cost of all purchased inputs except an industry's own factors of production, it represents the total returns to all factors employed by the industry. Net value added should not be confused with producer profits, which deduct the cost of factors of production. Net value added is a legitimate and, from economists' perspective, the preferred measure of an industry's contribution to the economy. Net value added is comparable to the figures given in national domestic product and income accounts.

The value added by the agro-food system can be estimated for different:[9]

- products or product groupings,
- firms, industries, groups of industries, or the entire economy,
- number of intermediaries or levels separating agriculture from the final consumer.

Such comparisons can be made over time, or the value added by one entity can be compared to others as a measure of relative importance in the same time period.

Gross and net value added can be calculated for all the goods produced and sold by an industry, or they can be calculated on a per unit basis.[10] On-farm value added can be found from farm cost of production data. Off-farm measurements usually emphasize forward linkages after the farm gate. Off-farm figures can then be broken down by marketing function such as processing and transportation, and wholesaling. Other common breakdowns are gross value added by input cost category, and the shares of net value added contributed by different factors of production.

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[9] Wood, E.G.: Added Value: The Key to Prosperity-Third edition; Tip tree, Essex: Business Books Ltd., 2000, p. 16
[10] Chopra, S. and P. Meindl: Supply chain Management: Strategy, Planning, and Operation-2nd Ed.; Upper Saddle River, NJ: Pearson Prentice Hall, 2004, p 24.

2. INCREASING THE VALUE-ADDED IN AGRICULTURE

There are two concepts that can be applied in order to increase value adding in agriculture. First one is based upon increasing the efficiency of production, and thereby widening the margin between gross output value and the cost of intermediate inputs. Second approach towards incensement of the value added is by changing the form, function, quantity, or other product or process characteristics that increases the margin between gross output value and intermediate input cost.[11]

When considering efficiency incensement as a way of value adding, one must bear on mind that efficiency can be separated into technical, allocative, or scale efficiencies. Technical efficiency compares an agribusiness's ability to utilize labor, land, intermediate inputs, and capital to similar agribusinesses. If one agribusiness can produce agro-food product with five attributes and another agribusiness can produce agro-food product possessing ten attributes with the same amount of inputs, the first agribusiness is considered only half as (technically) efficient as the second. Prices play no role in technical efficiency. Prices are important in an agribusiness's allocative efficiency, however. Allocative efficiency compares input and output choices of firms based on prices. For example, if two agribusinesses both produce agro-food products with ten attributes, but one agribusiness's costs are 10 units while the other agribusiness incurs 5 units in costs due to using a different mix of inputs or finding a cheaper source of supply, the higher cost agribusiness is said to be (allocatively) inefficient. Alternatively, if an agribusiness could increase its revenues by producing eight kilos of wheat and two kilos of corn instead of two kilos of wheat and eight kilos of corn, without changing costs, the agribusiness would be allocatively inefficient due to its choice of outputs. In both cases, both agribusinesses might be technically efficient in terms of converting inputs to outputs. Finally, scale efficiency refers to the overall size of an agribusiness's operations. Depending upon production practices, an agribusiness might face increasing, decreasing, or constant returns to scale. Under increasing returns, for example, the per unit cost of production might fall if the plant were to increase in size. Numerous studies have compared the technical, allocative, and scale efficiencies in agriculture and agribusiness and

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[11] Coltrain, D., D. Barton and M. Boland. Value-Added: Opportunities and Strategies, Arthur Capper Cooperative Center, Department of Agricultural Economics, Cooperative Extension Service, Kansas State University, 2000, p. 7.

concluded that not all agribusinesses are efficient.[12] When they are inefficient in the production of their core products, increasing value added can result from pinpointing and correcting the sources of the inefficiencies. Two points are important in considering efficiency. First, the individual agricultural producer (agribusiness) might best increase value added by improving the technical, allocative, and/or scale efficiency of their core production (business). Second, when considering expanding into new value-added ventures, proposed business plans should be compared with existing agribusinesses. If the proposed development fails to achieve common norms for technical, scale, or allocative efficiency, plans should be redrawn, reconsidered, or scrapped.

Most agricultural value-added discussions focus on changes in the form of primary agricultural products, changes in the production process, or changes in marketing strategies (new products, new ventures, new markets). The single assumption connecting these efforts is that there are unexploited profits going unclaimed in the manufacture of food, fiber, industrial, or other products from raw agricultural outputs. However, this concept requires more entrepreneurial behavior of agricultural producers and agribusiness, followed by focusing on niche markets or developing new uses for their products. Namely, if farmers only invested in additional processing activities for their products, they could bypass the monopoly power of large agribusiness firms and thus retain more of the value of the raw agricultural product by selling directly into the wholesale or retail markets. This strategy might be successful if new ventures can deliver either a new product filling a niche market, or if the venture allows an entrepreneur to bring a product to market at a lower cost than existing firms. Cost advantages might result from lower input costs, an improved technology, or a transportation advantage to reach a market.

Having on mind this two principal concepts, adding value to agricultural and food products can be accomplished in a number of different concrete ways, but generally falls into one of two main types:[13] innovation or coordination.

Innovation is about improving existing processes, procedures, products, and services or creating new ones. Innovative value-added activities developed on farms or at agricultural experiment stations are sources of national growth through changes either in the kind of product or in the technology of

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[12] Sato, K. "The Meaning and Measurement of the Real Value Added Index," The Review of Economics and Statistics, Vol. 58, No. 4. (Nov., 1976): 434-442.
[13] Tilley, D.: "Value-Added Activities as a Rural Development Strategy: Discussion."Southern Journal of Agricultural Economics, 1989, p.21

production.[14] Innovation also can come from research about alternative crops that can be grown successfully by producers to replace traditional crops.

A specific type of innovation is industrial innovation by which traditional crops are processed into nonfood end uses. In these innovative value-adding activities, thanks to the scientific research, final product actually represents nonfood use for common agricultural products (ethanol from corn, biodiesel from soybeans).

Coordination, either horizontal or vertical, focuses on coordination (arrangements) of the activities between those that produce and market farm products in order to actively change traditional marketing relationships that link consumers, food retailers and wholesalers, food processors, and producers. Horizontal coordination means consolidation among individuals or companies from the same level of the food chain. Vertical coordination includes contracting, strategic alliances, licensing agreements, and single ownership of multiple market stages in different levels of the food chain.

A specific type of coordination is vertical integration where the idea is to align and control all of the segments of a production and marketing system under single ownership. The factors aligned and controlled are price, quantity, quality, and transactional terms of exchange and the benefits are consistent quality from the field to the shelf, elimination of middlemen and even saving money for consumers.[15]

Nevertheless, before producers examine value-added processing and marketing, cost minimization in production much be achieved. Only low cost and efficient producers will be able to survive and compete in production agriculture. Adding value cannot take the place of reaching the efficiencies of production attainable through technology and economies of scale.

Conclusion

Ever since agriculture becomes economic activity, agricultural producers and policymakers are seeking to extract more local value from both agricultural products and from land, capital, and people. In today's global

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[14] Kraybill, D., and T. Johnson: "Value-Added Activities as a Rural Development Strategy." Southern Journal of Agricultural Economics,1989, p.167-170.

[15] King, R.. "Management and Financing of Vertical Coordination: An Overview." American Journal of Agricultural Economics, 1992, p. 215.

economy characterized by severe competition, for survival of their businesses, agricultural producers other than on producing primary commodities must also focus on examining ways to improve the returns from their farm operation. Adding value to agriculture is a logical answer that can stem the decline in farm income and provide a decent standard of living.

In this paper we have explained that adding value to agricultural products is the process of changing or transforming a product from its original state to a more valuable state that is preferred in the marketplace. Possible approaches toward value added incensement in agriculture are through innovation and/or coordination. Innovation focuses on improving existing processes, procedures, products, and services or creating new ones. Industrial innovation is processing traditional food products into nonfood uses. Coordination involves arrangements along the food chain. Horizontal coordination entails pooling or consolidation from the same level of the food chain. Vertical coordination involves contracts and agreements along different food-chain levels. Vertical integration aligns and controls price, quantity, quality, and transactions.

However, at the end we must point out that even if in today's economic environment adding value to agricultural products becomes vital, before producers examine value-added processing and marketing, cost minimization in production has to be achieved. Namely, adding value cannot replace the efficiencies of production attainable through technology and economies of scale.

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SOCIO-ECONOMICS IMPACTS OF TOURISM

Abstract

Tourism is a global phenomenon in which different cultures, nations and races intertwines, in order to satisfy the tourist as a content consumer. Tourism sector contributes a lot to the overall world economy, and society.

Tourism is the economic division that continually evolves in any national economy, the statistical data represent that 2010-2014 it was developed by over 3% annually. Tourism is also a branch that does not absorb the benefits of the national economy, but it is a branch in which most of the final consumer is a person beyond national borders. The internationalization of tourism gives the right to be the engine of global international economic exchanges. In 2014, tourism was the fourth place as a branch that contributes

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to international trade in 1409 billion dollars. Also, international tourism has achieved 30% of the overall exports from service sector that is 6% of total world exports.

With more than 1.1 billion tourists involved in international travel each year, tourism continues to be a force with greate socio-economics and enviromental influence on tourism destinations.

Key word: Tourism industry, economic impacts, socio-cultural impact, enviromental impacts, tourism destination

JEL clasification: Z3; Z32; Z33

Introduction

As defined by the World Tourism Organization, tourism is the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purpose. Therefore the people, who are considered to be 'tourist', are those who are:

- away from their normal place of residence for a period of up to one year (but will return home);

- taking part in activities that would normally be associated with leisure and tourism;

- temporary and short term visit;

- not necessarily away from home overnight as they could be on a day trip or excursion; and

- away from home but not necessarily on holiday, as they could be away on business.

There are three main types of tourism; domestic tourism, incoming or inbound tourism and outbound tourism. *Domestic tourism* is when people take holidays, short breaks and day trips in their own country. *Incoming/*

inbound tourism entails people entering the country in question from their home country, so it is a type of international tourism. And, outbound tourism is when people travel away from their home country to visit other international countries for leisure or business.

1. STRUCTURE OF TOURISM INDUSTRY

In order to assist people with their travel arrangements, there are specialist **travel service providers**. These include travel agencies which retail travel products direct to the individual or groups and business travel agencies specialized in providing travel for the business customer or promoting, conference trade. Tour operators provide a package for the individual and principals providing the basic services required by the travel and tourism industry. It is possible to divide the components of the travel and tourism industry into six key areas, as represented in Figure 1.

Travel agents provide a customer with advice and professional guidance on the choice of a holiday or to purchase travel products. The main aims of travel agents are:

- to sell holidays and associated products like insurance, car hire and currency exchange;
- to provide information;
- to advise clients.

Figure 1: Components of tourism industry
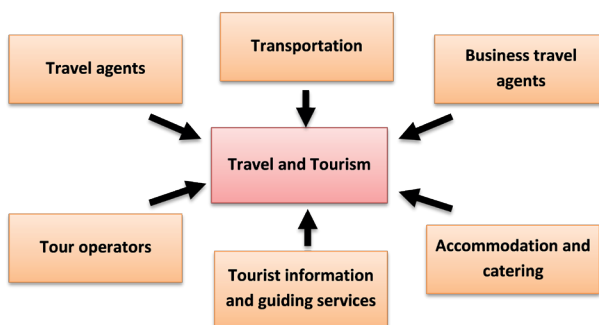
Source: World Tourism Organization (2015), UNWTO Annual Report 2014, UNWTO, Madrid.

They sell their products in the same way as other high street shops, so they advertise their products and special offers to supply customers with what they want. They act as agents for the suppliers of industry products or 'principals' such as airlines, rail companies, hotels, ferry and cruise companies, car hire companies, tour operators, and foreign currency suppliers. They earn their income from the commission paid by these principals. They supply brochures to potential customers for them to browse through and then take bookings along with any deposits or payments. They will use computer reservations systems or view data systems to investigate availability and the costs of any planned journey or holiday and advice on the suitability of the accommodation or transport to meet the customers' needs.

Another type of travel agent is the business travel agent who specializes in arranging accommodation and transport specifically for the business traveler; whether this is to attend conferences, develop new business or visit existing or new suppliers. Agents arrange flight, transfers and accommodation suitable for the business traveler. Some large companies have their own travel agencies at their headquarters to organize the travel needs for the company. This is only beneficial when a company undertakes a large volume of business travel and tends to happen in large multi-national companies.

A **tour operator** puts together holiday package which consist of: travel (road, rail, sea and air), accommodation (hotels, guesthouses, self-catering villas or apartments) and travel services (transfers to and from the destination airport, car hire, excursions).

The package holiday offered may cover a wide range of destinations, both national and international, and can cover a variety of holidays, such as cruises, adventure, touring, winter and summer destinations. The tour operators act as the 'wholesalers' in the travel industry, as they produce a package holiday and then negotiate with travel agencies the commission they will receive to sale these to the end user, the customer.

There are two types of tour operator: the wholesale operators, who put together and operate tours only thought retail travel agencies; and the direct sell operators, who market their products direct to the public (in other words they do not use travel agencies to promote their products).

Tour operators may specialize in a particular type of product – some only offer holidays within the home country, others operate only in a particular field, such as cruises, whereas others cover a wide range of holiday opportunities. Incoming tour operators or inbound handling agents specialize in tours for overseas visitors in the home country thus earning money for the national

economy. Examples of worldwide tour operators are American Express and Thomas Cook, thought there are others such as Kuoni and Preussag.

The tour operator will cost the package to include travel and accommodation and also produce brochures, employ and train staff (such as holiday representatives or tour directors.) They undertake market research on not only type of holiday in demand but which principals to use, and maintain their central reservations systems and customer support.

The principals within the industry, as previously mentioned, include the transport, accommodation and attraction providers. These provide the finance required to operate the product and act independently of tour operators or travel agencies, earning their income from sales, whether to individuals or tour operators. They supply the initial product, whether it is hotel accommodation, an airline, catering or an attraction.

As of the principals in the industry, **transport providers** are those operating any major form of transport. These would include *the airlines* providing the seats which an individual traveler, business person or tour operator may purchase. The airlines may be scheduled airlines operating to a timetable from large regional and national airports, or they may be chartered airlines. *Ferry operators* are another type of transport principal. Ferries provide vital links between groups of islands, or islands and a larger land mass. These services are provided for all travelers, not just tourists, but tickets are also sold to tour operators, through travel agencies or direct to the customer. *Rail companies*, whether national organizations or privately owned rail companies, are also transport principals, and provide a scheduled service within the home country. Seats may be reserved by individual or business travelers either direct with the provider or through travel agencies. Tour operators may reserve seats for specific groups of travelers on a particular route. Any seats not used by the tour operator would be available to the general public to purchase on an individual basis.

A tourist's choice of transport would depend on:

- Price
- Destination
- Time – how much is available
- Reason – visiting family or friends, business or leisure
- Departure points – how easy it is to get here
- Convenience.

In order to encourage more people to buy their holidays, many tour operators will provide flights from more accessible regional airports either direct to the final destination or to one of the major international airports which operate long-haul flights.

Many travelers wish to be independent at their destination and so require the services of *car hire principals* who provide cars of varying specifications to suit different group sizes and budgets. These may be hired independently through international chains, such as Hertz or Avis, to be available at the point of arrival for the period of the booking, or may be hired through travel agencies and tour operators. Many tour operators now promote self-drive holidays, where the flight and car hire are included but the more independent travelers buy their own accommodation in the destination country. Business travelers may also require car hire in order to visit customers in the destination country, so the business travel agency could make a booking.

Accommodation principals are those who build and staff hotels, villas, apartment resorts or holiday cottages which are available to any traveler. Some of these are major international chains such as Marriott Hotels, Holiday Inn, Comfort Inns and Hotels; others are smaller providers who may only own one or a small chain of hotels. The accommodation may be marketed individually by the provider or rooms purchased by a tour operator in order to make up a package holiday often at a special rate. The benefit to the accommodation provider of selling through a tour operator is that they have a more guaranteed occupancy rate throughout a holiday season. Otherwise they may have to spend large amounts of money on advertising in order to attract sufficient individual customers to make a profit.

Accommodation is divided into two basic categories: serviced accommodation (where meals are provided such as in hotels and guesthouses) and self-catering accommodation (such as cottages, chalets and apartments where the occupants provide their own food). Tourists can also reserve accommodation on different terms such as:

- Bed and breakfast (where the price only includes the provision of bed and breakfast which may be cooked, buffet style or continental);

- Half board (with bed, breakfast and either lunch or evening meal included in the price);

- Full board (where accommodation and all meals are provided);

- All-inclusive (which includes accommodation, all meals, snacks and beverages for the period of the stay).

Though accommodation is a major feature of travel and tourism, visitors require *catering facilities*, and principals within the industry include those providing a variety of outlets for food and refreshment. Whether a visitors is only away for a few hours, or for a longer holiday, food and/or drink will be required and these can be found at a variety of outlets. Airlines, ferries and rail principals will usually provide some form of catering and outlets will also be provided at airports or terminals. Visitor's attractions often provide a variety of catering outlets which may include a cafeteria, self-service food selection area or a restaurant with waitress service. Even cinemas and theatres may sell snacks, ice creams or confectionery and drinks.

Major resort areas and hotels provide a wider choice of catering facilities, ranging from fast food outlets to restaurants providing various meals from different ethnic regions. There could also be cafeterias where snacks and meals can be purchased plus bars and coffee shops. Even large shopping malls and sporting venues provide catering outlets for the convenience of participants and spectators.

The principals in service sector may provide and attractions for the visitor. The attractions must be by need for the attraction in that particular location and its potential audience. Attractions maybe purpose built, such as theme parks or they may be part of a nation's cultural heritage. They may also be created for a purpose, for example zoos. Other attractions may relate to the industrial heritage or scientific development of a country. Some large companies allow visitors to tour their factories or manufacturing plants.

Many countries with an established or significant travel and tourism industry or those aiming to increase the national income by promoting tourism further, are likely to have a separate governmental departments or a public body responsible before the government for this purpose. These bodies are known as National Tourism Organizations or NTOs.

A typical NTO will have four main areas of responsibility:

• Marketing;

• Research and corporate planning (i.e. undertaking market research and deciding the policies and strategies for the organization);

• Development (looking at ways to develop tourism further, through customers care and quality assurance, liaison over training, trade relations and product development);

• Finance and administration (managing its budgets, corporate press and publicity, staffing and general administration functions including information technology).

Part of the role of the regional tourist boards is to provide information to visitors when they are actually in that area. This is done through Tourist Information Centers (TICs). These may be located at points of entry to the areas (such as railway or bus stations) or at central points in the towns or cities, often with signs directing visitors to them. Inside the TIC there will be displays of leaflets and brochures on local attractions, entertainment venues and events, and possibly details about public transport such as timetables for buses and rail travel within the local area. There may also be a touch-screen facility enabling visitors to locate particular places of interest. One of the services provided by the TIC is information on accommodation in the area and many are able to take bookings on behalf of local hotels and guesthouses for a small deposit.

Another ancillary service within the industry is the provision of tourist guiding services. These may come in the form of tour guides, guides or tour directors. They are selected group of people because of their knowledge of the specific area and also their ability to organize and manage people, so their skills must include good communication and administration. They may be required to deal with customer complaints and negotiate with other providers, such as the coach company, hotel accommodation if this is provided and excursion providers whilst on a tour. Other types of guiding services include those specifically located at an attraction, such as museum guides. They usually have a specific, detailed knowledge of the attraction in question, and may be able to conduct tours in a particular foreign language to help visitors from overseas who do not speak the local language.

2. SOCIO- ECONOMIC AND ENVIRONMENTAL IMPACTS OF TOURISM

Tourism has great impact in regions and countries where it is developing. It is well known that tourism, in global, as well as in local frames has economic, social, cultural, environmental impacts in tourism destinations. [5]

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[5] Ackovska, M.: Turismot i ekonomskiot razvoj na Republika Makedonija. Ekonomski institut, Skopje, 2009, p.88.

2.1. Social and cultural impacts of tourism

The tourism impacts on area social and cultural are enormous. Social and cultural impacts of tourism include such benefits, as[6]:

- Local community can mix with people from diverse background with different lifestyles which through 'demonstration effect' may lead to the development of improved lifestyles and practices from the tourists' examples;

- there can be an improvement in local life through better local facilities and infrastructure (developed to sustain tourism) which could lead to better education; health care, employment opportunities and income; more cultural and social events available for local people such as entertainment; exhibitions etc.

- Improved sports and leisure facilities created for the tourists which local people may use, particularly out of the tourist season;

- Conservation of the local cultural heritage of an area and rebirth of its crafts, architectural traditions and ancestral heritage;

- Urban areas which may be in decline can be revived and the movement of people from rural areas to urban areas for employment may be reversed as jobs will be available in the tourism industry;

- Increase in youth exchange programs, villages tourism, home swap programs and voluntary work overseas.

- However, tourism may have negative effects on an area, such as:

- Infrastructure (roads, railways, health care provision) may not be able to cope with the greater numbers created by tourism;

- Poor sanitation may lead to diseases for both tourists and local population;

- Local population's activities and lifestyles may suffer intrusion from tourists leading to resentment towards tourists;

- Local population may copy lifestyles of tourists through the

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[6] See: McKercher, B. and Cros, H. :Cultural tourism, The Haworth Hospitality press, New York, 2002. P 151-179.

'demonstration effect' and the result could be a loss to local customs and traditions as well as standards of behavior;

- There could be a loss of native languages and traditions leading to the area losing some of its original appeal;

- Increased crime rate could develop through a decline in moral and religious values, leading to greed and jealousy of wealthier visitors;

- Traditional industries may be lost and local goods substituted by imported and mass-produced goods which lack authenticity but appeal to a mass market;

- Tourists may act in an anti-social manner which could cause offence to the local population. Unless sufficient information is provided by the host nation and tourist providers on the standards of behavior expected in that area, local populations may come to resent tourists and act aggressively towards them, or the host community adopts the same anti-social behavior;

- Tourists may be unprepared for social contact and interaction with the host community (particularly in large self-contained resort areas) which leads to resentment and constraint in the host community;

- There may be language barriers between the tourist and the host community which may create communication problems.

Providing careful planning is undertaken in an area where tourist development is being considered and the host community fully involved in that planning. Many of these negative factors may take some time to become apparent in the host community so planners need to research tourist development and its effects to try and prevent problems arising.

2.2. Economic impacts of tourism

The major benefit of tourism for a region or country is economic as it provides an opportunity for job creation and generation of revenue at international, national, regional and local levels. Tourism can also benefit economies at regional and local levels, as money comes into urban and rural areas which in turn stimulates new business enterprises and promotes a more positive image in an area. Revenues from foreign visitors were much

higher in accommodations, food and beverage, entertainment, purchases and other services and products reaching export of 1,245 billion in 2014, a 3.7% increase compared to 2013. International tourist arrivals grew by 4.4% in 2014 reaching 1.135 billion visitors. [7]

Figure 2: Internal tourism consumption
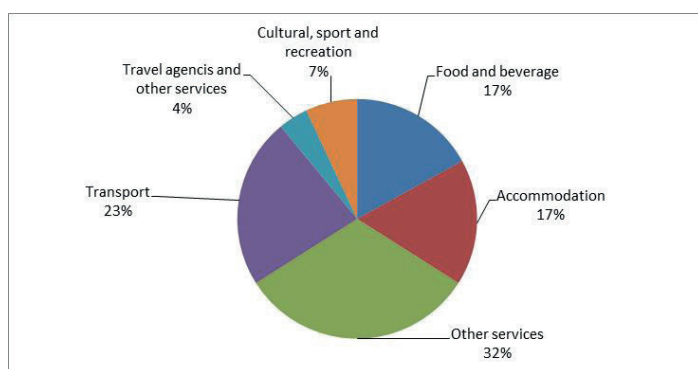
Source: OECD Tourism Trends and Policies 2014

When an area developed as a tourist destination, the local economy benefits because new jobs are created and visitors bring more business to local shops and restaurants. The income generated can then be used to improve local services, whether by developing better transport and infrastructure, or by providing more facilities for residents and visitors, such as leisure centers, shopping areas and entertainment or attractions. This is known as the '**multiplier effect**'.

The balance of payments is a statement which shows the flows of international currency and capital items to and from a particular country. Items are classed as either 'visible' or 'invisible'. Visible are items which can be seen – such as cars, electrical products or raw materials - and invisible items are those which cannot be physically seen – such as shipping, banking, tourism and insurance. The tourism balance of payments for a particular country is the figure which shows all the earnings from overseas visitors, less any payments made by its own residents who travel abroad.

The multiplier concept is the term used to calculate the benefit of tourism income to a particular region.[8] Money spent by tourists in a destination area has both direct and indirect economic benefits. Enterprises which offer tourist facilities, such as hotels, attractions and transport

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[7] World Tourism Organization (2015), UNWTO Annual Report 2014, UNWTO, Madrid.
[8] Vanhove, N.: The economics of tourism destinations, ELSEVIER, Oxford, p 120.

operators, benefit directly from presence of the tourist, such as shops, banks, and businesses which provide goods and services for the tourist (like laundries and food suppliers).

A small local restaurant is more likely to have a higher income multiplier effect, as it would use local staff and probably local suppliers. But a large city-center hotel may be part of a national or international chain, and goods and services may be purchased centrally by the organization, so less of the income earned by the hotel is spent in the local area.

International tourism (travel and passenger transport) make up 30% of world exports of services and 6% of total exports of goods and services. By all export categories, tourism ranks fourth after fuels, chemicals and food, and is the first place in many developing countries. [9] On average tourism covers 9% of GDP or every 11th employee is in tourism in 2014[10].

Tourism is a very people-oriented business, therefore the opportunity to create employment in an area is one of the attractions to governments. If an area has suffered from declining industries and levels of unemployment are high, tourism could be a way of revitalizing that area and creating employment. But the skills needed within the industry may not be the same as the traditional industry, so efforts are made to retrain and recruit those with the necessary expertise (such as communication, personal presentation or specific catering qualifications, for examples). Some of the employees may need to be relocated to the developing area, particularly where there are skills shortages, but others will be employed locally. Other local residents may see an opportunity to become self-employed and develop their own business in the tourism sector. An converting buildings into holiday cottages, or a fisherman unable to earn sufficient income through fishing alone offering boating or fishing trips to visitors round the local coastline.

Direct employment in tourism occurs in accommodation and catering, transport operations, travel agencies, tour operators, tourist attractions and government department (such as tourist boards and tourism information centers, national parks and monuments, air traffic control and lifeguards.) Tourism employment opportunities may also arise more indirectly, through areas such as customs and immigration officials at land borders, ports and airports; and capital investment jobs (design and construction of highways, airports, aircraft, hotels/resorts and cruise ships, for example). Employment

[9]. Travel and Tourism Economic Impacts 2015, WTTC, p 3 and 4.
[10].http://media.unwto.org/press-release/2015-04-15/exports-international-tourism-rise-us-15-trillion-2014

opportunities may also grow in areas concerned with the supply and production of travel products (film developers, sign markers, laundries, food producers and chemists, for example).

The negative impact of employment within the tourism industry can be that, as the work may be seasonal, the employees may not have the same loyalty and commitment to the job, ant take little interest in gaining skills and qualifications in the industry, the hours can be long and the salary may not always compete favorably with other industries, so potential employees may not see their work as a career opportunity. This can have an effect on the way tourists experience an area. Poor service or an otherwise unfavorable experience may affect a tourist's enjoyment of an area. The tourist is unlikely to return to that area and may tell others, thus creating a decline in demand affecting other tourism providers in that area.

Tourism is considered to be a growing industry, but if potential visitors do not have the income to spend on tourism, a negative aspect could be a recession in tourism. If a developing country is over-dependent on tourism, then the economic and social problems caused by a recession I the industry could be great. Governments need to develop strategies to reduce over-reliance on tourism employment to minimize these effects. A further aspect of over-dependence is that employees may be attracted to employment in tourism-related work and leave their traditional primary industries, particularly in developing countries. This has the effect of loss of labor in those traditional industries, causing labor supply problems.

Another negative impact of tourism can be inflation in prices of goods and services in an area, which causes difficulties for the local residents. The businesses catering for the tourist may increase their prices to attract more revenue but the local population may not be able to pay these higher prices. Prices of houses in a popular tourist area may rise, so local people may no longer be able to afford to buy there. This can happen where houses are purchased as second homes or holiday villas meaning they are no longer available to local residents. A social difficulty could arise as younger people may be forced to move from the area in order to be able to purchase a property. Local shops and businesses may decide to cater more for the tourist market, this reducing the facilities and choice for local inhabitants who may need to travel further for basic supplies of goods. If an area is spending money on the development of facilities for tourists, such as hotels or roads, then there is less money available for other capital projects such as schools and hospitals which an area may need.

2.3. Environmental impacts of tourism

An attractive environment appeals to tourists, whether natural or built, and the development of tourism in a locality will relate to the surrounding area. The term 'environment' refers to the physical setting in which tourism takes place – this could be coastal resorts, historic cities, mountain ranges, picturesque villages, sites of cultural interest including museums and national monuments – and which provides the stimulus for travel.

Tourism itself will affect the environment in both positive and negative ways. The following lists summaries these effects. The positive effects may include[11]:

- increased investment in the area (may improve facilities, access and enable development);

- conservation of features encouraged (buildings, wildlife, countryside);

- increased income for upkeep and preservation of facilities.

- On the other hand, negative aspects could include:

- appealing environment spoilt by over-development;

- local people displaced due to development of coastal resorts;

- damage to natural flora and fauna;

- scarcity or reduction in water supply/quality to meet tourism demands;

- increased litter and waste disposal problems;

- greater air pollution and noise from overcrowded facilities/increased art traffic.

There are pressure groups that campaign to preserve the environment and try to prevent over-development, such as Friends of the Earth and Tourism Concern. Governments department is many countries aim to achieve sensitive tourism development that is respectful of local environments and customs. The more involved a local community is with the development of tourism in an area, the less damaging the impact of tourism may be on that area. However, the local community may see the benefits of tourism development

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[11] Eagles, F.J.P.: Sustainable Tourism in Protected Areas. Guidelines for planning and management, IUCN. Cambrige, 2002, p.130.

without being fully aware of the negative effects or costs to the community. Or they may focus on the threats to the environment without seeing the positive aspects. This is where local tourism forums (such as regional tourist boards) can help focus the issues and provide an opportunity for discussion and analysis as well as raising public awareness.

Conclusion

Tourism industry is one of the fast growing industries in the world. Tourism sector has significant impact on employment, foreign exchange flows, and on all economic and social activities. Tourism sector gives incentive for development of other industries. Generally, tourism effects are determined by following factors:

- attraction of tourism destination;
- scope and intensity of tourism flow;
- level of economic development of tourism destination;
- scope and quality of tourism infrastructure in tourism destination;
- level of recirculation of tourism consumption in tourism destination;
- level of destination adoption on seasonal tourism demand.

Tourism consumption is a generator of economic impact of tourism. Its impact depends of the number of foreign tourists, flows in that consider, investment and other multiplicities in defined area. Tourism consumption might be: direct, indirect and induced. So, the impacts are also divided on: direct, indirect and induced.

Direct impacts are the most transparent impact and are the most significant. They consider on direct participants that offer tourism services (tourism sector). Indirect impacts are related to inter-sectoral exchange, i.e. tourism sector supplies that come from other sector of the economy. What refers to induced impacts, they are generated from the growth of income from economic activities, as well as a result of initial change of final consumption and recirculation of increased income of local or national economy.

Tourism sector can influence the on the whole community of one country, taking into consideration three main aspects as: economic, environmental

and socio-cultural. The impacts might be positive or negative, but in general positive effects are dominant.

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WESTERN BALKAN COUNTRIES BEFORE AND AFTER THE GREAT RECESSION (2000-2014)

Abstract

The main goal of this paper is to analyze the economic transition process in the Western Balkans (WB) in the period between 2000-2014. In this period, countries made radical political changes and economic reforms. They opened up to global trade, became increasingly export-oriented and expanded the role of the private sector. They also fulfilled criteria regarding convertibility of the current account, interest rates liberalization, price liberalization and small-scale privatization. However, reforms, such as large-scale privatization, competition policy and governance and enterprise restructuring, have still been delayed.

In all WB countries except in Serbia, the inflation rate during this period is low, which is very big achievement taking into account the history of hyperinflation at the beginning of the transition. Furthermore, from the

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year 2000 onwards, the countries under review also made progress in real convergence, but the gaps in terms of income per capita relative to the euro area, remain large. In comparison with the 90s when the high political risk has been the main barrier for more foreign direct investment inflows, after the year 2000 foreign investors have become increasingly interested for this region.

Key Words: Western Balkan, economic transition, market economies.

JEL Classification: E24; E31; F16; F31; F32

Introduction

In the countries of Western Balkan (Macedonia, Serbia, Montenegro, Bosnia and Herzegovina, Croatia, Kosovo and Albania) the transition to a market economy, in comparison with the more advanced countries in Central and Eastern Europe (CEE), has evolved under more difficult conditions. These countries are still lagging behind the New Member States of the European Union in terms of economic transformation and income levels. The new member states that joined EU in the period from 2004-07 have on the whole been more successful than the Western Balkans in consolidating economic reforms, integrating into the world economy and attracting foreign investment. This situation in the WB is due to a different factors, such as greater physical distance from the Europe's core and many institutional and cultural factors that pre-date communism.

But, if we analyse the history, it is interesting to underline that at the end of the 80s SFR Yugoslavia was the most developed and largest country in SEE, primarily due to its longer experience with market-oriented economic reforms and greater openness of its economy. At the time of the break-up of Yugoslavia in 1991, all its successor states generally had less distorted economies than the centrally planned economies in the CEE[5].

However, we have to emphasize that while the rest of Emerging Europe transitioned peacefully from communism into market economies, many Western Balkan countries in the 90s coped with conflicts, civil unrests, sanctions and blockades, which affected their integration with in the EU. The

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[5] IMF (2015).

wars and political unrests distracted substantial foreign investment, significantly slowed the economic reform and the privatization of property, which had social implications on employment. Most economies experienced severe recessions, because of collapsing of the trade which had been large within the Yugoslav Federation.[6] On the other hand, Albania, was nearly completely autarkic at the time it began to open up from its self-imposed isolation in 1991. According to this, in the Western Balkan region, most of the problems of transition, such as high inflation, a substantial fall in real GDP, a rise in unemployment, have been of much greater scope than in the CEE countries.

However, over the last 25 years, the WB countries have experienced a notable transformation. The progress after 1991 has been evident in every country. They opened up to global trade and became increasingly export-oriented, furthermore they expanded the role of the private sector and began to build institutions needed to support a market system. The result of these efforts has been a significant rise in incomes and living standards, as well as enhanced macroeconomic stability.

The main goal of this paper is to analyze economic transition process in the Western Balkans and to determine the degree of nominal and real convergence in the period between 2000-2014. In the first part we analyze the degree of macroeconomic stability, as a condition for joining the EU and we make comparative analysis of the price and exchange rate stability in these countries as well. In the second part, we examine the degree of real convergence in the WB countries and the relations between GDP and unemployment rate, which are major concern in these countries. In the third part we put focus on the external imbalances in the countries of this region and the impact of foreign direct investment on these economies before and after the Great Recession. At the end, we describe the success of the implementation of transition processes, which is monitored by macroeconomic indicators, developed by the European Bank for Reconstruction and Development (EBRD).

1. MACROECONOMIC STABILITY IN THE COUNTRIES OF WESTERN BALKAN AS A CONDITION FOR JOINING THE EU

During the accession to the EU it is essential to achieve and preserve macroeconomic stability, seen, above all, in stable prices and exchange rates.

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[6] Uvalic (2010).

Without a stable macroeconomic environment it is impossible to fulfill the conditions required for the European integration, but it is also impossible to achieve a faster economic growth. According to the Maastricht Treaty, the price stability is related to the three best performing Member States in term of price stability. The same applies to the fluctuations in exchange rates, which are determined by the multilateral arrangement, known as ERM II (Exchange Rate Mechanism II).

Almost all WB countries in the past faced hyperinflation episodes. The country that has had highest and longest inflationary pressures was FR Yugoslavia, which in the year 1993, had one of the highest hyperinflations ever recorded in economy. After the split between Serbia and Montenegro in the year 2006, the inflation in Serbia was at around 11 per cent. In order to escape from inflationary pressures within FR Yugoslavia, Montenegro, introduced the German mark as legal tender, and later on the euro. This contributed to substational low level of inflation. In Kosovo, where the euro has also been used as legal tender after mid-1999, inflation remained relatively high, but has also been reduced to low levels after the year 2003 and in some periods this country faced with deflation[7]. In the table below the annual inflation rate in the period between 2000-2014 for separate WB countries is represented.

Table 1. Inflation, consumer prices (annual)

Year	Macedonia	Serbia	Montenegro	Bosnia and Herzegovina	Croatia	Kosovo	Albania
2000	6,61	71,12	n.a	n.a	4,61	n.a	0,05
2001	5,20	95,00	n.a	n.a	3,77	n.a	3,11
2002	2,31	19,49	n.a	n.a	1,68	n.a	7,77
2003	1,10	9,88	n.a	n.a	1,75	-1,08	0,48
2004	0,93	11,02	n.a	n.a	2,05	-1,05	2,28
2005	0,16	16,12	n.a	n.a	3,32	-1,39	2,37
2006	3,21	11,72	2,92	6,12	3,21	0,62	2,37
2007	2,25	6,39	4,38	1,51	2,86	4,36	2,93
2008	8,33	12,41	8,76	7,42	6,09	9,35	3,36
2009	-0,74	8,12	3,47	-0,39	2,40	-2,41	2,28
2010	1,51	6,14	0,65	2,188	1,04	3,48	3,55
2011	3,90	11,18	3,45	3,67	2,25	7,34	3,45
2012	3,32	7,33	4,14	2,05	3,42	2,48	2,03
2013	2,78	7,69	2,21	-0,09	2,21	1,76	1,94
2014	-0,28	2,08	-0,71	-0,93	-0,201	0,43	1,63

Source: Authors' calculations based on World Bank Country Database

n.a(not available)

As we can see from the table above in all WB countries except in Serbia the inflation rate is low, which is very big achievement taking into an account the history of hyperinflation at the beginning of the transition.

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[7] World Bank Country Database

During the analyzed period, Serbia was the only country which fell behind the regional trend of disinflation. In the last year of observation Macedonia, Montenegro, Bosnia and Herzegovina and Croatia had disinflation, while inflation rate in Serbia, Albania and Kosovo was very low.

Low and stable inflation could not be achieved in any different way than by stabilizing or fixing the exchange rate. With the exception of Croatia and Serbia, which chose managed floating and Albania which chose floating exchange rate, but with a tight monetary policy, other Western Balkan countries have chosen a more or less fixed exchange rate system: Macedonia chose de facto fixed exchange rate to euro, Montenegro unilateral euroization, Bosnia and Herzegovina currency board pegged to euro. This policy contributed to dramatic disinflation and succeeded in accomplishing price stability in a longer period of time[8]. But, we have to take into account that while these policies were successful in reducing inflation, they have not assured longer-term economic development and a fast catching-up with the more developed European countries.

2. REAL CONVERGENCE IN THE WESTERN BALKAN COUNTRIES

The economies of Western Balkan have witnessed significant economic improvement in the period between 2000-2007. This growth was driven more by ample global liquidity and unsustainable capital inflows than by real progress in the economic reform.[9]

As we can see from the table below the period before the year 2008 can be qualified as a rather successful in terms of stable and robust growth. But, as the crisis caused tighter credit conditions, the growth in these countries after the year 2009 significantly declined. In the table, we can also note the significant differences in growth levels within the group.

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[8] Belke and Zenkić (2007)
[9] European Commission (2009)

Table 2. GDP per capita growth (annual %)

Year	Macedonia	Serbia	Montenegro	Bosnia and Herzegovina	Croatia	Kosovo	Albania
2000	4,55	7,76	3,10	5,50	3,77	n.a	6,67
2001	-3,08	4,99	1,10	4,40	3,43	26,97	7,94
2002	1,49	7,12	1,90	5,30	5,24	-0,70	4,23
2003	2,22	4,41	2,50	4,00	5,56	5,98	5,77
2004	4,67	9,05	4,40	6,09	4,08	2,61	5,71
2005	4,72	5,54	4,19	5,00	4,16	6,03	5,72
2006	5,14	4,90	8,57	6,52	4,78	4,50	5,43
2007	6,47	5,89	10,66	5,98	5,15	7,29	5,9
2008	5,47	5,37	6,92	5,59	2,05	2,64	7,53
2009	-0,36	-3,12	-5,66	-2,72	-7,38	3,34	3,35
2010	3,36	0,58	2,46	0,84	-1,70	3,31	3,71
2011	2,34	1,40	3,23	0,96	-0,28	4,62	2,55
2012	-0,46	-1,01	-2,72	-1,21	-2,19	2,81	1,42
2013	2,67	2,57	3,55	2,8	-1,06	3,44	1,11
2014	3,78	-1,81	1,78	0,78	-0,36	1,22	2,17

Source: Authors' calculations based on World Bank Country Database

However, the high GDP growth rate in the most of the countries has been insufficient to alleviate the problem of very high unemployment. Even though all governments have undertaken measures to create new jobs for laid-off workers, to stimulate private sector development and to facilitate the entry of new private firms, the WB unemployment rates have still been the highest in Europe (see chart 1).

Chart 1. Unemployment, total (% of total labor force)
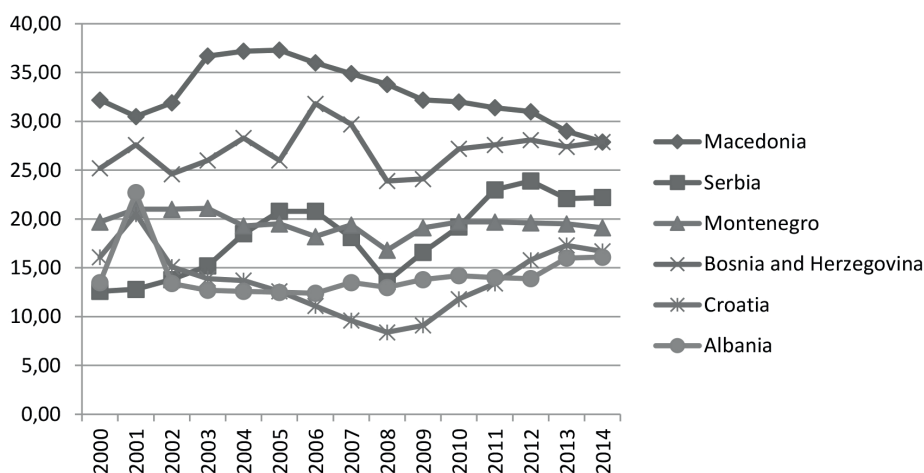
Source: Authors' calculations based on World Bank Country Database

From the chart above we can see that the labour market performance shows significant disparities across countries. Bosnia and Herzegovina and the Republic of Macedonia had the highest unemployment rates in the year 2014 both of them 27,9%, whereas unemployment levels were significantly lower in Croatia (16,7%) Albania (16,10%) and Montenegro (19,10%).

3. EXTERNAL IMBALANCES IN THE WESTERN BALKAN COUNTRIES

As we mentioned earlier, as the WB countries transitioned toward market-based systems, the economies have become increasingly export-oriented. After a decade of declining or stagnating exports, caused by the break-up of the Yugoslav federation, WB countries' exports have been growing since the year 2001. The average share of exports in the GDP increased from 27.12 in 2000 to 37.26 in 2014, but with disparities across the countries. For example, during the analyzed period the average export as a percent of GDP was 39.41 in Croatia, and 26.45 in Albania (see Chart No.2).

Chart 2. Exports of goods and services (% of GDP)
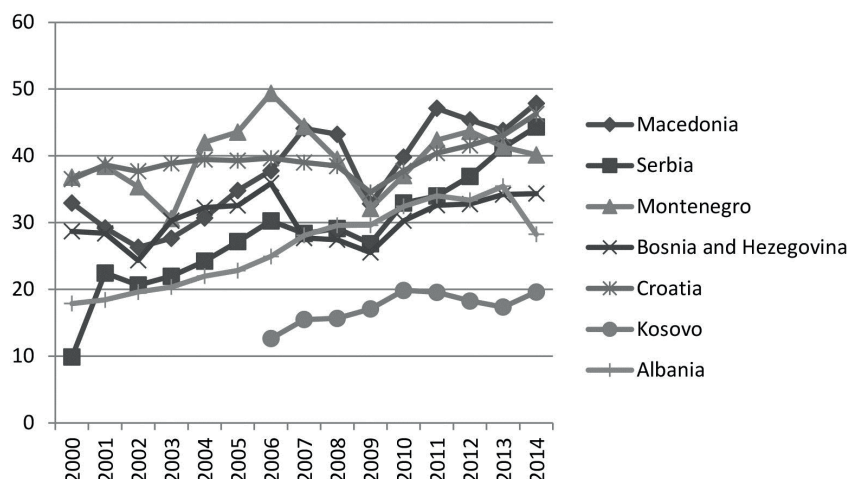
Source: Authors' calculations based on World Bank Country Database

But in comparison with the New EU Member states the contribution of net exports to GDP growth was lower. This is primarily due to the restrictive monetary policies (which were implemented to combat inflation) which led to strong real appreciation of the national currencies. Furthermore, many WB products are not sufficiently competitive on foreign markets or face non-tariff barriers. On the other side, imports have grown even faster, inducing rising foreign trade deficits.

In the period between 2007-2014 the average current account deficit as a % of GDP was: -4,65 in Macedonia, -11,04 in Serbia; -25,83 in Montenegro, -8,52 in Bosnia and Herzegovina, -3,15 in Croatia, -10,74 in Kosovo and -12,56 in Albania[10].

The high current account deficits have been covered by continuous inflows of capital from abroad, such as remittances, foreign loans, and foreign direct investment. In comparison with the 1990s when the high political risk has been the main barrier for more FDI inflows, after the year 2000 the foreign investors have become increasingly interested in the WB region. This is due to many factors such as: stabilisation of the region from late 2000 onwards, improvement of regulatory and structural reforms; the prospect of

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[10] World Bank Country Database

EU accession; fall in the interest rates in Western Europe with the introduction of the euro and creation of the conditions for capital inflows to emerging economies, including the Western Balkans[11].

FDI has rapidly increased, in the years 2006, 2007 and 2008 (see chart 3). But, we have to underline that foreign direct investment were biased toward the non-tradable sector and consumption rather than investment, and thus had no significant impact on productivity growth and the creation of a strong export base.

Chart 3. Foreign direct investment, net inflows (BoP, current US$)
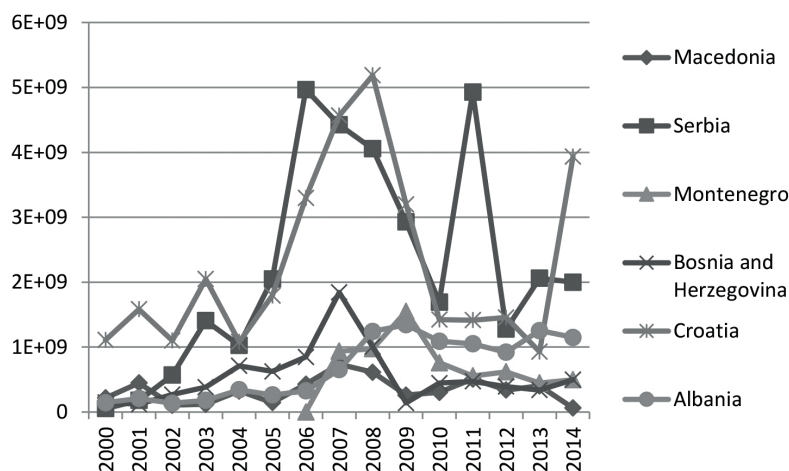
Source: Authors' calculations based on World Bank Country Database

In standard economy theory, capital account liberalization would allow more foreign inflows, more investment and rapid growth in the capital stock, ultimately raising living standards. But, as it is well known in practice, sharp increases in capital inflows have often been associated with misdirected credit, absorption as consumption instead of investment, price and asset inflation, and deteriorating competitiveness[12].

Due to their large external financial needs, the SEE countries have been among the most exposed to the global credit crunch. FDI and other forms of foreign investment, in most of the countries in the year 2009 started

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[11] European Commission (2009)
[12] Obstfeld and Rogoff (1996)

to dry up and the financial and non-financial private sectors encountered difficulties in servicing their external debts. Some countries started to use part of their official foreign exchange reserves in order to meet external financing requirements.

But, fortunately, capital flows appear to have been more stable in the Western Balkans than in many other Emerging European economies in the postcrisis period. FDI continued to flow in, albeit at a lower level, and portfolio and other inflows remained positive and substantial as well[13].

4. EVALUATION OF TRANSITION PROCESSES THROUGH TRANSITION INDICATORS

Although the transition from socialism to capitalism was less smooth for the Western Balkan countries than for the other parts of Emerging Europe, they made very big progress in the period from the year 2000 onwards. The level of progress achieved in various aspects of transition is quantified by using EBRD transition indicators. The indicators are measured on a scale from 1 to 4, where 1 represents little or no progress in reform and 4 means that a country has made significant progress in a particular aspect of a transition[14].

The process of transition was not uniform across the region, because the starting positions were very different. For example Albania, started the transition process as an isolated and autarkic state with virtually no elements of a market economy.

Despite a difficult decade in the 90s, by the year 2000 the Western Balkans as a group had reached advanced stage of transition, measured on average by a value of 4.1 in the area of price liberalization, 4.2 in the area of trade and foreign exchange, 3.78 in the area small-scale privatization in the year 2014. However, reforms, such as large-scale privatization, competition policy and governance and enterprise restructuring were delayed, and were measured on average 3.28; 2.53 and 2.48 accordingly, in the year 2014.

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[13] Zugic, (2011)
[14] EBRD (2015)

Table 3. Transition indicator scores in WB in 2000 and 2014

	Large Scale privatisation		Small scale privatisation		Governance & enterprise restructuring		Price liberalisation		Trade & Forex system		Competition Policy	
	2000	2014	2000	2014	2000	2014	2000	2014	2000	2014	2000	2014
Macedonia	3,0	3,3	4,0	4,0	2,3	2,7	4,0	4,3	4,0	4,3	2,0	2,7
Serbia	1,0	2,7	3,0	3,7	1,0	2,3	2,3	4,0	1,0	4,0	1,0	2,3
Montenegro	1,7	3,3	2,0	3,7	1,0	2,3	3,7	4,0	2,3	4,3	1,0	2,3
Bosnia and Herzegovina	2,0	3,0	2,3	3,0	1,7	2,0	4,0	4,0	3,0	4,0	1,0	2,3
Croatia	3,0	3,7	4,3	4,3	2,7	3,3	4,0	4,0	4,3	4,3	2,3	3,3
Albania	2,7	3,7	4,0	4,0	2,0	2,3	4,3	4,3	4,3	4,3	1,7	2,3

Source: European Bank for Reconstruction and Development, database on Transition Indicators[15]

Table 4. Transition development snapshots in WB

	Current account convertibility	Controls on inward direct investment	Interest rate liberalization	Wage regulation	Tradability of land
Macedonia	full	yes	full	no	limited de jure
Serbia	full	no	full	no	limited de jure
Montenegro	full	no	full	no	limited de jure
Bosnia and Herzegovina	full	yes	full	no	no
Croatia	full	no	full	no	full
Albania	full	no	full	no	limited de facto

Source: European Bank for Reconstruction and Development, database on Transition Indicators[16]

According to the transition indicators presented in the previous tables, we can notice that Croatia is the most advanced country, while all other countries are more or less at the same level of achievement.

If we analyzed these countries as a whole, we can notice that they fulfill criteria regarding convertibility of current account and interest rates liberalization, and they have removed wage regulation. All countries except

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[15] http://www.ebrd.com/what-we-do/economic-research-and-data/data.html
[16] http://www.ebrd.com/what-we-do/economic-research-and-data/data.html

Macedonia[17] and Bosnia and Herzegovina[18] have removed controls on inward direct investment. All WB countries have de facto limited tradability of land, except Bosnia and Herzegovina. In Croatia, the land is tradable, but the right to trade land applies to foreigners only on the basis of reciprocity[19].

The biggest progress is made in the area of price liberalization and foreign trade exchange system. All countries have successfully implemented price liberalization and have opened up their economies through reforms of the foreign trade regime.

The progress in large-scale privatizations was uneven across the region. While many WB countries had already initiated these privatizations in the late 1990s and early 2000s, Bosnia and Herzegovina, Serbia, and Montenegro joined the process at later stages. Albania and Croatia are the most privatized WB economies, measured with the score of 3.7 in 2014, while the private sector has grown the least in Serbia and Bosnia and Herzegovina. In many cases, enterprises were sold at privileged conditions to employed workers and managers, rather than outside owners or foreign investors.

Although, the most SEE countries have reduced subsidies to large non-privatized enterprises and have adopted laws promoting competition, monopolistic structures continue to dominate in a number of sectors. As a result, in the area of competition policy, all countries except Croatia were evaluated in 2014 with a score of 2.3 and Macedonia with a score of 2.7.

Taking all this into account, the Western Balkans still lag far behind the EU and New Member States in the process of economic reforms. Corporate governance and enterprise restructuring of former state-owned enterprises remained a challenge across the region.

Conclusion

The transition from socialism to capitalism in the Western Balkan countries was less smooth than in the other parts of Emerging Europe, which transitioned peacefully into market economies. Unlike them, many WB countries in the 90s coped with wars, civil unrests, international sanctions and blockades. Due to this, WB countries face the risk of permanent

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[17] There are controls on arms productions, trade in narcotics, historical and cultural heritage
[18] There are restriction on the production and sale of arms, ammunition and military
[19] EBRD (2015)

marginalisation on the periphery of Europe. The region suffers from low investment, high unemployment rate, weak and fragile growth.

However, in the period from 2000 onwards, these countries made radical political changes and economic reforms: they opened up to global trade, became increasingly export-oriented, expanded the role of the private sector, rapidly adopted modern banking systems and began to build institutions needed to support market system.

In all WB countries except in Serbia, the inflation in the last 15 years has been very low, which is very big achievement taking into account the history of hyperinflation, at the beginning of the transition. Low and stable inflation was achieved by stabilizing or fixing the exchange rate. But, even though exchange rate targeting succeeded in accomplishing price stability in a longer period of time, it has not corresponded to some faster economic growth of these countries.

The WB countries experienced strong growth especially before the global financial crisis. The improved performance in the period from 2001-08 was driven by unsustainable inflows in the years before the crisis, not by real progress in economic reform. However, high GDP growth rates in most countries have been insufficient to alleviate the problem of high unemployment rates, which are the highest in Europe.

As the WB countries transitioned toward market-based systems, economies have become increasingly export-oriented. WB countries' exports have been growing since the year 2001. However, imports have grown faster, inducing rising foreign trade deficits, which were covered by continuous inflows of capital from abroad, especially foreign investment. After the year 2000, foreign investors have become increasingly interested in the WB region, due to many factors, such as: stabilisation of the region from 2000 onwards, improvement of regulatory and structural reforms, the prospect of EU accession, fall in the interest rates in Western Europe with the introduction of the euro etc.

By the year 2000, the Western Balkans countries has reached advanced stage of transition in the area of price liberalization, trade and foreign exchange and small-scale privatization. They also fulfilled the criteria regarding convertibility of current account and interest rates liberalization. However, reforms, such as large-scale privatization, competition policy and governance and enterprise restructuring have still been delayed.

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DEMOGRAPHIC CONSEQUENCES OF THE EMIGRATION FROM THE REPUBLIC OF MACEDONIA

Abstract

The growing trend of the emigration abroad from the Republic of Macedonia is confirmed by different data sources. The total number of Macedonian citizens all over the world amounts approximately 630 thousands persons (2013) and the emigration rate reached around 30%. The aim of the analyses in this paper is to identify the demographic consequences of the intensified emigration abroad in the last two decades due to the manifested changes of migration contingent features. It is observed on the example of three receiving countries (Germany, Italy and Switzerland), which share in the total number of Macedonian citizens all over the world amounts more than one quarter.

Considering the very high emigration rate, large permanent emigration and significant changes in the migration contingent structure, the analyses in

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the paper show that Macedonia is facing serious demographic consequences with long-term implications. Emigration abroad has significant consequences on the total population growth in the country, natural population increase and the process of population ageing.

In order to identify the determinants of the natural population increase of the migration contingent, the CCR-LM model is applied for the period 2008-2014. The results are showing that the share of Macedonian live births in Germany, Italy and Switzerland in the total number of live births in the country, is mostly correlated with the increase of the share of total Macedonian migrants in these countries in the total population of the country, as well as with the share of Macedonian women in Germany, Switzerland and Italy in the total women population in Macedonia.

Keywords: Republic of Macedonia, emigration, demographic consequences, natural population increase, correlation

JEL classification: J110, C1

Introduction

The intensified emigration abroad, especially in the last two decades, the big migration potential (particularly the intellectual emigration) and the small scope of return migration, are undeniably imposing the fact that the emigration abroad became one of the dominant factors determining the population development in Republic of Macedonia.

The aim of the analyses in this paper is to identify the demographic consequences of the intensified emigration abroad and manifested changes of the migration contingent features. Indisputable fact is that the migration is difficult to analyze: the process is complex, the data poor, and the theory unsatisfactory, and beside that its many factors include unpredictable policy change[4]. In this respect the Republic of Macedonia is faced with serious problem because there are no relevant data from the domestic statistics for the scope, demographic and socio-economic features of the population that have left the country, while the foreign data sources are limited and very often incomplete.

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[4] *David Coleman, "*The demographic effects of international migration in Europe", *Oxford Review of Economic Policy* (2008) 24 (3): 452-476.

Having in mind this, the demographic consequences of the emigration of Macedonian citizens abroad are identified on the case of three receiving countries that have relatively great share in the migration contingent and for which there are relevant data from foreign data sources. These are Germany, Switzerland and Italy, the three receiving countries whose participation in the total number of Macedonian citizens all over the world amounts more than one quarter, and more than three quarters in the European receiving countries. So, they could be considered as good example for identifying the demographic consequences of the Macedonian emigration abroad.

In order to identify the determinants of the natural population increase of the migration contingent, quantification of the impact of six relevant factors is made. For that purpose, the Correlated Component Regression (CCR) analysis is applied on the example of the abovementioned receiving countries (Germany, Italy, Switzerland) with high share in the migration contingent and in the live births abroad, for the period 2008-2014.

1. CHANGES AND CURRENT SITUATION OF THE EMIGRATION ABROAD

The current territory of the Republic of Macedonia is a traditionally emigration area in which the migratory movements abroad are dating from the beginning, and the contemporary economic emigration from the mid-sixties of the last century. Although the most popular destinations are well known, the total number of Macedonian citizens abroad remains unknown. Because of the long history of emigration abroad (in some families is repeated for several generations) today there aren't relevant data on the "old" migration and their descendants (second and third generation), as well as for those who have returned to the country. Moreover, in the recent decades, only a small part of the Macedonian citizens have officially registered their stay abroad, which is making the available national statistics for the people who are temporarily or permanently leaving the country incomplete.

The data from the population censuses show that in the period 1971-1994, the number of Macedonian citizens abroad was increased by three times (from 56,449 to 173,611 persons). In the structure of the total migration contingent high increase was noted in the share of the family members which in 1994 was almost equal to that of the migrant workers. This means that

in the early nineties of the last century the emigration abroad had acquired permanent character.

The scope of citizens who are leaving the country and who are registered with the regular statistical survey of the migration from the State Statistical Office of the Republic of Macedonia, is very small and shows only the number of persons who have officially registered their stay abroad.[5] According to these data, in the period 1994-2014, 12,219 Macedonian citizens have left the country, out of which 3,476 persons or 28.4% in the period 2009-2014.[6]

In such circumstances, the changes and the current situation of the scope of emigration from Macedonia and the structure of the migration contingent can be seen only on the basis of foreign data sources from the international organizations/institutions and national statistics of the receiving countries. Available data from the different foreign sources more or less are differ and confirm that studying the international migration is hampered by the lack of comprehensive and consistent data series for the consideration of all aspects of the migration process. However, the analyses of the total emigration from Macedonia and of the migration contingent in the countries that are considered in this paper, gives relevant findings on the trends of these movements, as well as of the changes in their scope and structural features.

The World Bank statistics for the bilateral estimation of the migration stock in the receiving countries, according to the migrant's country of origin, shows that the total number of the Macedonian citizens (migration stock) worldwide, covered with these data in the period 1960-2013 is with variable dynamics and confirms the previous statement of the migration data inconsistency. Regardless of that, they indicate a rising trend of the emigration from Macedonia and in 2013 their number amounts more than 600 thousand Macedonian citizens, which represents 30.3% of the total population in the country (Table 1). The great change in the total number of migrants in 2013 compared to 2010, according to the analyses by countries, shows that it is a result of the incomplete coverage of the Macedonian citizens in certain overseas countries and in the Balkan countries of reception in previous years

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[5] This research is based on the reports about the immigrated – emigrated person obtained from the regional offices of the Ministry of Interior. It is conducted under the Law on State Statistics («Official Gazette», no. 54/1997 and 22/2007), the Law on Registration of Residence of Citizens and the Law on Movement and Stay of Foreigners («Official Gazette», no. 36/1992, 12/1993, 43/2000 and 66/2007).

[6] State Statistical Office of the Republic of Macedonia (www.stat.gov.mk)

(1990, 2000 and 2010). But, it does not exclude the fact that after 2010, increase of the emigration abroad was recorded.

Table 1

Total Number of Macedonian Citizens in Receiving Countries all over the World, World Bank Bilateral Estimates of Migrant Stocks

Year	1960	1970	1980	1990	2000	2010	2013
Number	111,617	145,109	468,654	223,563	342,243	447,138	626,312

Source: World Bank (2016): Bilateral Migration Matrix in:
http://go.worldbank.org/JITC7NYTT0 (last access 26.02.2016)

The large number of the Macedonian citizens abroad is also confirmed by the national statistics of the receiving countries. They show that in a considerable number of the receiving countries worldwide, in the last decade, their number was significantly increased. This was confirmed by the data from the population censuses in 2011. According to the available data of the receiving countries in 2011/2012 the total number of Macedonian citizens abroad is around 560 thousand persons or about 27% of the country's population in 2012.

The growing trend of the emigration abroad from the Republic of Macedonia is also confirmed by the Eurostat data. Despite the manifested oscillations, they show that in the European receiving countries, the number of Macedonian citizens has increased from 135 thousand in 2000 to 260 thousand in 2013, i.e. to 240 thousand persons in 2014. The largest increase is noticed in the receiving countries of the European Union, especially in 2011, after the stagnation during the economic and financial crisis (2008-2010). These trends correspond with the changes in the migration policies of the receiving countries.

In terms of the geographical distribution of the Macedonian citizens abroad, based on all available data, it can be concluded that in the last two decades, Australia, Italy, Germany, USA and Switzerland have remained the five receiving countries with the largest number of immigrants from the Republic of Macedonia. Regarding the European countries, the most important destination are: Germany, Italy, Switzerland, Austria, Slovenia and Belgium (Eurostat data), i.e. Sweden (Census of population 2011).[7] In the last

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[7] European Commission, & GVG, *Social Impact of Emigration and Rural-Urban Migration in Central and Eastern Europe* (VT/2010/001) – Synthesis Report, June 2012, p. 58.

decade, the largest increase was registered in Germany, Belgium, Switzerland and Slovenia, where the number of Macedonian immigrants has increased for about 71 thousand persons (period 2003-2014). At the same time, Germany, Italy and Switzerland have remained the European receiving countries with the highest number of Macedonian citizens, whereas their total number amounts 152,195 (2003) and 212,741 persons (2014).[8]

Taking into account the abovementioned data sources it can be concluded that the emigration rate in the country today ranges from 27% to 30%. This means that out of the country there is very large proportion of the population. The foreign data sources confirm that in the last decade the permanent emigration remains relatively large. At the same time, significant growth is noticed in the temporary migration (for employment abroad, family reasons, study or for other reasons), which is constantly transformed into permanent emigration. As for returning flows of the Macedonian citizens who are residing abroad, all data sources show that they were and remain relatively small.

Regarding the scope, the emigration abroad also is characterized with the changes in the demographic and socio-economic features of the migrants. In the migrants' structure the share of the youth remains dominant, and large increase is noticeable in the share of women and family members. Beside this, the number of children born abroad is continuously increasing. In terms of very high emigration rate, large permanent emigration and significant changes in the migration contingent structure, Macedonia is facing serious demographic consequences with long-term implications.

Due to a lack of complete data, the analysis in this paper is focused on identifying the demographic consequences on the example of the migration contingent in the three receiving countries - Germany, Italy and Switzerland for two reasons. First, the participation of the Macedonian citizens in these three countries in the total migration contingent worldwide is 38.4% (World Bank, 2013), i.e. 88.6% of the total number of migrants in the European receiving countries (Eurostat, 2014). Second, for the migrants in these countries there are data for the changes in their scope and demographic structure. Therefore, based on the analysis of the three receiving countries, relevant conclusions on the demographic consequences about the emigration abroad from the Republic of Macedonia can be drawn.

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[8] Eurostat; Population by sex, age and citizenship (migr_pop1ctz); (http://epp.eurostat. ec.europa.eu)

2. FEATURES OF THE EMIGRATION IN GERMANY, ITALY AND SWITZERLAND

2.1. Changes in the migration contingent

The emigration from the Republic of Macedonia in Germany, Italy and Switzerland has a long tradition. It can be seen from the available data of the previous Population censuses in Macedonia, from the databases of the international institutions and from the national statistics of these receiving countries.

With the Population census 1994 in Germany, Italy and Switzerland were recorded 61645 persons or 35% of the total number of Macedonian citizens abroad. Regarding the receiving countries in the period 1971-1994, Germany and Switzerland stood out with relatively high common share in the total number of Macedonian citizens abroad (45.5% in 1971 to 34.9% in 1981 and 33.5% in 1994) and a very large increase in the share of the family members (Table 2). The number of migrants in Italy, however, in the period 1981-1994, had registered a very large increase, especially among the employees abroad. The changes in the migratory contingent of the Macedonian citizens in these three countries of reception up to 1994 imply a growth on the basis of family reunification and the gradual creation of the migratory networks, which had determined the changes in the next two decades.

Table 2

Census data for Macedonian Citizens in Germany, Italy and Switzerland

	Number			Share (in %)		Share (in %)	
	1971	1981	1994	1981	1994	1981	1994
TOTAL	**56,449**	**100,922**	**173,611**	**100.0**	**100.0**	**100.0**	**100.0**
Employed abroad	54,433	57,964	87,715	57.4	50.5	100.0	100.0
Family members	2,016	42,958	85,896	42.6	49.5	100.0	100.0
GERMANY*	**24,851**	**28,896**	**34,393**	**100.0**	**100.0**	**28.6**	**19.8**
Employed abroad	24,851	18,661	17,567	64.6	51.1	32.2	20.0
Family members	…	10,235	16,826	35.4	48.9	23.8	19.6
ITALY	…	**228**	**3,477**	**100.0**	**100.0**	**0.2**	**2.0**
Employed abroad	…	142	2,742	62.3	78.9	0.2	3.1
Family members	…	86	735	37.7	21.1	0.2	0.9
SWITZERLAND*	**857**	**6,285**	**23,775**	**100.0**	**100.0**	**6.2**	**13.7**
Employed abroad	857	5,476	12,193	87.1	51.3	9.4	13.9
Family members	…	809	11,582	12.9	48.7	1.9	13.5

* There are no data for family members
Source: State Statistical Ofice of the Republic of Macedonia, Census of Population, Households and Dwellings in the Republic of Macedonia, 1981; Census of Population, Households, Dwellings and Agricultural holdings in the Republic of Macedonia, 1994

As for the databases of the international institutions, according to data completeness the World Bank stands out. They show that in the period 1960-2013, the number of the Macedonian citizens in Germany, Italy and Switzerland, although with some fluctuations, noticed very large absolute and relative increase. In 2013 the total number of Macedonian citizens in these three countries amounts around 240,000 persons that is 38.4% of the migratory contingent (Table 3).

The OECD data, although differ from those of the World Bank, are confirming that the total number of the Macedonian citizens in Germany, Italy and Switzerland in the recent years is very large. According to these data it is 201,439 persons (2010), 193,545 (2011) and 193,030 persons (2012), that is about 10% of the total population in the Republic of Macedonia.[9]

The data of the National Statistical Offices of Germany, Italy and Switzerland, even though they are giving different data on the number of immigrants from Macedonia, still, basically confirm the conclusion that this number is very high and that the structure of the migration contingent is changing towards increase of the family members participation. For example, according to these data, in 2011 the number of the Macedonian citizens in these three countries was around 220,000 persons.[10]

Table 3

World Bank data for Macedonian Citizens in Germany, Italy and Switzerland, 1960-2013

Destination country	1960	1970	1980	1990	2000	2010	2013
Germany	4,689	22,794	32,954	28,788	54,994	99,646	114,083
Italy	4,320	7,417	6,904	16,850	44,657	101,539	68,714
Switzerland	1,455	3,920	11,355	23,592	58,224	46,581	57,907
TOTAL - three countries	**10,464**	**34,131**	**51,213**	**69,230**	**157,875**	**247,766**	**240,704**
Total number of macedonian citizens in receiving countries all over the world	111,617	145,109	468,654	223,563	342,243	447,138	626,312
Share (in %) of the migrants in three countries in the migration contingent	9.4	23.5	10.9	31.0	46.1	55.4	38.4

Source: World Bank (2016): Bilateral Migration Matrix in: http://go.worldbank.org/JITC7NYTT0 (last access 26.02.2016).

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[9] Source: OECD, International Migration Statistics, (https://stats.oecd.org/Index. aspx?DataSetCode=MIG)

[10] Source: Federal Statistical Office of Germany (https://www.destatis.de/EN/Homepage.html); The Italian National Institute of Statistics (http://en.istat.it/); The Federal Statistical Office of Switzerland (http://www.bfs.admin.ch/bfs/portal/en/index.html)

Eurostat gives the most comprehensive data on the migration contingent in the three analyzed receiving countries in the last decade. It show that regardless of the manifested changes, the share of the Macedonian citizens in Germany, Italy and Switzerland in the total number of migrants in the European receiving countries, in the period 1997-2014 was and remains dominant. In 2014 in these three countries around 212 thousand persons were residing (Table 4).

Based on all available data one can conclude that the emigration from the Republic of Macedonia in Germany, Italy and Switzerland in the last two decades, has noted continuous and rapid growth, primarily under the influence of the established migration networks, and that the migration contingent have reached very large scope. In such circumstances, the emigration in these countries has a growing impact on the demographic changes in the country.

Table 4

Eurostat data for Macedonian Citizens in Germany, Italy and Switzerland, 1997-2014

Destination country	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Germany	38,774	42,550	46,167	49,420	51,841	55,986	58,250	61,019	61,105	62,093	66,219	66,433	66,196	66,651	70,140	71,517	77,200	71,684
Italy	11,596	13,456	16,647	21,110	:	:	34,019	51,208	58,460	63,245	74,162	78,090	65,809	69,208	71,315	73,972	76,608	78,424
Switzerland*	45,146	48,604	51,142	54,042	56,092	58,549	59,926	60,676	61,008	60,898	60,362	60,184	59,909	60,043	60,116	60,741	61,668	62,633
TOTAL - three countries	95,516	104,610	113,956	124,572	107,933	114,535	152,195	172,903	180,573	186,236	200,743	204,707	191,914	195,902	201,571	206,230	215,476	212,741
Total number of macedonian citizens in European receiving countries	99,725	110,258	121,804	134,948	137,464	140,275	179,925	198,379	251,273	214,210	230,309	241,886	231,408	218,189	227,970	252,989	262,897	240,137
Share (in %) of the migrants in three countries	95.8	94.9	93.6	92.3	78.5	81.7	84.6	87.2	71.9	86.9	87.2	84.6	82.9	89.8	88.4	81.5	82.0	88.6

Source: Eurostat; Population by sex, age and citizenship (migr_pop1ctz); (http://epp.eurostat.ec.europa.eu)

2.2. Demographic structure of the migrants

The increase of the number of Macedonian citizens in Germany, Italy and Switzerland is accompanied by significant changes in the demographic structure of the migrants. The only comparable data for the structure of migration contingent in these countries according to gender and age are those of Eurostat, for the period 2009-2014.

The structure by gender suggests that women's share in the overall migration contingent in these three countries in the period after 2009 has shown a steady increase (Figure 1). In 2014 it amounts: 49% (Germany), 46% (Italy) and 48.6% (Switzerland). Such participation of women implies a continuous process of family reunification of the Macedonian citizens in these three receiving countries.

Figure 1
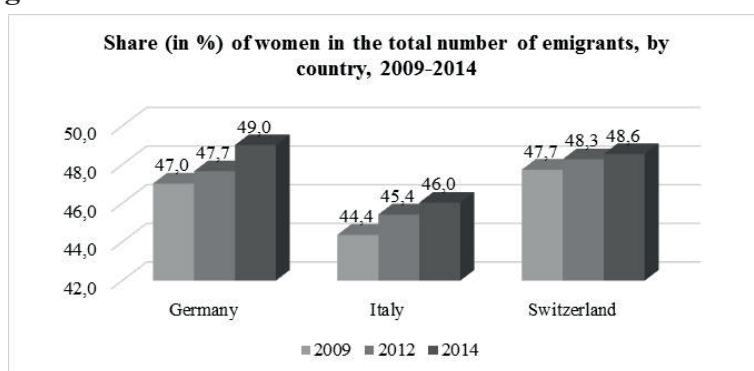
Source: Eurostat: Population by sex, age and citizenship (migr_pop1ctz),
http://epp.eurostat.ec.europa.eu

The structure of the Macedonian citizens abroad by age, viewed through the share of the large age groups, in the three analyzed receiving countries, is more or less different (Figure 2). Thus, in Germany the share of children (0-14 years) and of the working age population in the period 2009-2014 has slightly decreased, while the share of those aged 65+ has increased from 6.6% to 9.6%. Similar changes are characteristic for Switzerland, where the share of children is significantly higher, but of the older population (65+) is four times lower than in Germany. In Italy, however, the participation of children has decreased, while of the working age population and of the older population (65+) have increased.

Figure 2

Source: Eurostat: Population by sex, age and citizenship (migr_pop1ctz), http://epp. eurostat.ec.europa.eu
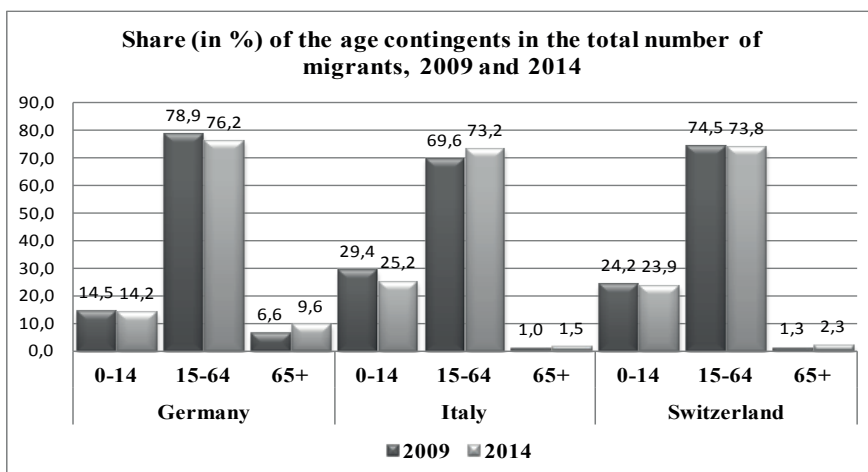
The changes in the scope and demographic structure of the migrants shows that after 1990, the contingent of Macedonian citizens in Germany, Italy and Switzerland noticed an increase on two grounds - the new emigration, mostly on the basis of family reunification, and the inflow of the second and third generation. Subsequently, the temporary has been continuously transformed into permanent emigration.

3. DEMOGRAPHIC CONSEQUENCES OF THE EMIGRATION ABROAD

The large increase of the emigration abroad and the significant changes in its structural features, assume numerous consequences and implications, which are manifested on the demographic and socio-economic development of the Republic of Macedonia. The impact of the emigration on the demographic development is direct and indirect and has a long-term effect. In this context, the demographic consequences of the emigration of the Macedonian citizens in Germany, Italy and Switzerland is observed through its impact on the total population growth, natural population increase and the population aging in the country.

Table 5

Basic functional contingents in Germany, Italy and Switzerland and their share in the contingents in the Republic of Macedonia, 2009, 2011 and 2014

	2009	2011	2014
Absolute numbers			
Total number of migrants in Germany, Italy and Switzerland	**191,914**	**201,571**	**212,741**
Children (0-14)	43,440	44,314	44,881
Working-age population (15-64)	142,654	150,092	158,279
Female (15-49)	54,159	57,467	61,816
Female (20-34)	28,683	29,760	30,827
Population aged 65+	5,820	7,165	9,434
hare (in %) in the total population/contingents in count			
Total number of migrants in Germany, Italy and Switzerland	**191,914**	**201,571**	**212,741**
Children (0-14)	12.0	12.5	12.9
Working-age population (15-64)	9.8	10.3	10.8
Female (15-49)	10.2	10.9	11.9
Female (20-34)	12.2	12.6	13.2
Population aged 65+	2.4	2.9	3.6

Source: State Statistical Office of the Republic of Macedonia, Natural Population Change, Statistical review: Population and Social Statistics no.: 2.4.10.08 (661); 2.4.11.10 (693); 2.4.12.07 (722), 2.4.13.12 (755) and 2.4.14.09 (787). (www.stat.gov.mk); Eurostat; Population by sex, age and citizenship (migr_pop1ctz);

a) ***Total population increase***

According to Eurostat data, the total number of Macedonian citizens in Germany, Italy and Switzerland has increased from 95,516 (1997) to 212,741 person (2014). This means that only on the basis of emigration in these three countries in this period, the population in Macedonia decreased for about 117 thousand people or for more than 5%. Therefore, it can be concluded that in the last two decades the emigration in the analyzed countries had great direct impact on the population growth.

Considering the predominant participation of the youth in the migration contingent, this impact is even more severe in certain age groups. Based on Eurostat data, it can be concluded that in these three receiving countries in 2014 reside 44,880 children (0-14 years) or 12.9% of children in the Republic of Macedonia (Table 5). The number of young people (15-29) in Germany, Italy and Switzerland, also recorded continuous growth and in 2014 amounts 54,945 persons, which is 12.3% of the number of young people in the country. Therefore, the common share of children and young people reaches almost 100 thousand persons, representing 47% of the migratory contingent in these three countries in 2014. These indicators confirm that there is a large scope of young people abroad, which undoubtedly has a direct and indirect impact on the demographic changes in the country.

In the period 2009-2014 continuous growth has been also recorded the working age population contingent. This number in the three countries of observation, reached about 158 thousand persons, representing 10.8% of the working age population in the country in 2014. Young people up to 29 years have dominant share in this contingent.

Regarding the indirect effects of the emigration, it is important to indicate the size of the fertile female population (aged 15-49) and the women on optimal reproductive (aged 20-34) in the migratory contingent of the Macedonian citizens in Germany, Italy and Switzerland. Their number is constantly growing, and their share in the same age groups in the country in 2014 have reached 11.9% and 13.2% respectively.

Longevity of the emigration and the prolonged residence abroad, determined the growth of the Macedonian citizens aged 65+ in the analyzed countries of reception. In the period 2009-2014, this segment of the migratory contingent has increased by 62% and their share in the total population in the Republic of Macedonia aged 65+ have increased from 2.4% to 3.6%.

These and the aforementioned indicators are confirming that in Germany, Italy and Switzerland a significant proportion of children, young

working age population and the population of fertile age is residing, which implies more pronounced long-term demographic consequences of the emigration abroad.

b) Natural population increase

In the last two decades the emigration abroad become an integral part of the population development in the country due to the large permanent emigration of the young population and of the growing number of children born abroad. The State Statistical Office data on the number of live born abroad, is showing that it is increasing year by year, and has a pronounced influence on the changes in the natural population increase in the country. In the period 2008-2014 this number was 27,886 children, which represents 17.0% of the total live births in the country (163,997) in the same period.[11]

The available data on the number of live births abroad shows that in the analyzed period, three-quarters of them belongs to Germany, Italy and Switzerland. Their common share in the total live births in the Republic of Macedonia, in the period 2009-2014, is continuously increasing and in last two years amounts more than 13% (Table 6).

Table 6

Live births of the macedonian citizens abroad - total,
in Germany, Italy and Switzerland, 2009-2014

Year	Total live births abroad		Live births abroad			Three countries - total		
	Number	Share (in %) of total live births in the country	Germany	Italy	Switzerland	Number	Share (in %) of total live births abroad	Share (in %) of total live births in the country
2008	3,728	16.2	393	1,174	1,311	2,878	77.2	12.5
2009	3,510	14.8	366	1,075	1,191	2,632	75.0	11.1
2010	3,642	15.0	306	1,233	1,276	2,815	77.3	11.6
2011	4,012	17.6	365	1,311	1,353	3,029	75.5	13.3
2012	4,221	17.9	369	1,395	1,402	3,166	75.0	13.4
2013	4,373	18.9	424	1,367	1,403	3,194	73.0	13.8
2014	4,400	18.6	518	1,286	1,410	3,214	73.0	13.6
Total	**27,886**	**17.0**	**2,741**	**8,841**	**9,346**	**20,928**	**75.0**	**12.8**

Source: State Statistical Office of the Republic of Macedonia, Natural Population Change, Statistical review: Population and Social Statistics no.: 2.4.10.08 (661); 2.4.11.10 (693); 2.4.12.07 (722), 2.4.13.12 (755) and 2.4.14.09 (787). (www.stat.gov.mk)

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[11] Source: State Statistical Office of the Republic of Macedonia, Natural Population Change, Statistical review: Population and Social Statistics no.: 2.4.10.08 (661); 2.4.11.10 (693); 2.4.12.07 (722), 2.4.13.12 (755) and 2.4.14.09 (787), (www.stat.gov.mk)

In absolute scope, the number of live births is very high in Italy and Switzerland. In this context, the data of the Federal Office for Migration of Switzerland are interesting, according to which in 2013, 17,953 persons or 28.7% of the Macedonian citizens with permanent residence (62,515 persons) were born in Switzerland.[12]

The increasing and high number of live births in Germany, Italy and Switzerland, clearly are presenting the demographic consequences of emigration in these receiving countries on the natural population increase in the country. Therefore, in order to perceive the determination of the increase in the number of Macedonian live births in these countries in the period 2008-2014, for the purpose of this paper, quantification of the impact of six relevant factors is made.

For that purpose, the Correlated Component Regression (CCR)[13] analysis is applied, which allows simultaneous adjustment for the effect of each indicator on the other, and hence shows the independent and unique contribution of each indicator. This statistical model is the best selection for the linear regression when all independent variables are positively and strongly correlated with the dependent variable. They are all predicators of the analyzed dependent variable. The CCR is the newest model that was introduced in the past several years that overcame the problem of lack of large time series data and the presence of high multicollinearity among the variables.

The CCR.LN model is applied for estimation of the statistical relevance of several demographic indicators on the share of the live born children abroad. The relationship assessment is made using the data from State Statistical Office of the Republic of Macedonia, and EUROSTAT considering the period 2009-2014. The CCR analysis was performed using XLSTAT 2016, to identify the optimal demographic factor associated with the share of the live-births abroad.

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[12] Source: https://www.bfm.admin.ch/dam/data/bfm/publiservice/statistik/auslaenderstatistik/2013/ts-2013e

[13] Correlated Component Regression – CCR is revolutionary new approach of the Predictive Modeling, developed by Jay Magidson several years ago, and it's totally different from the conventional methods. (https://www.xlstat.com/en/solutions/features/correlated-component-regression-ccr), last approached: 19.2.2016

The variables in the model are:

Y – Share of live births in Germany, Switzerland and Italy in the total live births in the Republic of Macedonia

X_1 – Share of total number of Macedonian migrants in Germany, Switzerland and Italy in the total population of the Republic of Macedonia

X_2 – Share of Macedonian women in Germany, Switzerland and Italy in the total number of women in the Republic of Macedonia

X_3 – Share of Macedonian women in the total number of Macedonian migrants in Germany, Switzerland and Italy

X_4 - Share of Macedonian women on fertile age (15-49) in Germany, Switzerland and Italy in the total number of women on fertile age in the Republic of Macedonia

X_5 – Share of Macedonian women on the optimal reproductive age (20-34) in Germany, Switzerland and Italy in the total number of the women on optimal reproductive age in the Republic of Macedonia

X_6 – Share of Macedonian men on fertile age (15-64) in Germany, Switzerland and Italy in the total number of men on fertile age in the Republic of Macedonia

The correlation matrix confirm that all independent variables are highly correlated one with other and with the dependent variable. The correlation index is in range from 0,824 – 0,916) that is very close to value of perfect correlation 1. The highest correlation index of 0,916 with the dependent variable has the share of total number of Macedonian migrants in the observed countries (Germany, Switzerland and Italy) in the total population of the Republic of Macedonia. Very high correlation index (0,910) has and the share of Macedonian women in Germany, Switzerland and Italy in the total women population in the Republic of Macedonia. It is nearly the same correlation index (0,907) for the share of the women that are on optimal reproductive age in the selected countries in the total number of the women on optimal reproductive age in the Republic of Macedonia. Also, the share of the women on fertile age in Germany, Switzerland and Italy in the total number of women on fertile age in the Republic of Macedonia has high correlation index and it is 0,902 (Table 7).

Table 7

Correlation matrix

Variables	X1	X2	X3	X4	X5	X6	Y
X1	**1.000**	0.996	0.909	0.987	0.996	0.970	**0.916**
X2	0.996	**1.000**	0.943	0.997	0.996	0.946	**0.910**
X3	0.909	0.943	**1.000**	0.965	0.927	0.788	**0.824**
X4	0.987	0.997	0.965	**1.000**	0.991	0.921	**0.902**
X5	0.996	0.996	0.927	0.991	**1.000**	0.949	**0.907**
X6	0.970	0.946	0.788	0.921	0.949	**1.000**	0.883
Y	**0.916**	**0.910**	**0.824**	**0.902**	**0.907**	**0.883**	**1.000**

Source: CCR-LN calculations with XLStat 2016

Coefficient of the determination in the model is $R_2 = 0{,}826$ and after cross-validation is $R_2 = 0{,}660$. This confirms that estimation model is reliable and around 66% of the variations in the Macedonian live births abroad for the analyzed period can be explained by the variations in the selected independent variables.

The model has the following appearance:

$$Y = -23.19 + 0.43X_1 + 0.37X_2 + 0.31X_3 + 0.27X_4 + 0.42X_5 + 0.49X_6$$

The figure 3 present the conditionality of the independent variables with the dependent variable after the cross-validation with the standardized coefficients. This confirms the previous conclusion of highly correlated variables and positive effects of all selected variables on the live births abroad.

Figure 3 The relationship of the dependent variable and standardized coefficients of the independent variables
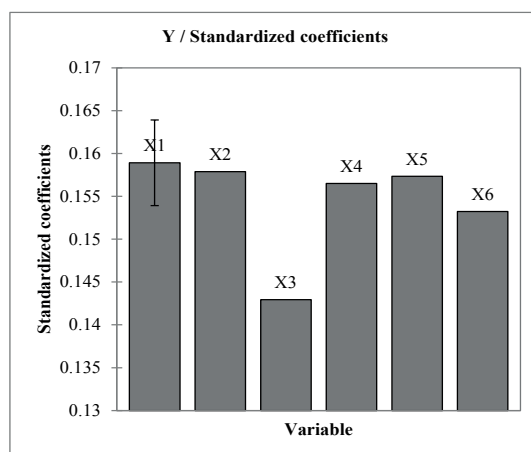
Source: CCR-LN calculations with XL Stat 2016

The applied model confirms that the changes in the abovementioned independent variables have positive impact on the natural population increase in the country. The significant rise of the numerical values of the selected demographic indicators in the analyzed period is the reason for increase of the live births abroad.

c) Population ageing

In terms of several decades' continuous emigration abroad increase, there is significant direct and indirect impact of these migratory movements on the acceleration of the demographic ageing process in the Republic of Macedonia. In the period 2009-2014 the population remained in the stadium of demographic old age, while the average age of the population increased from 36 to 38 years. On the population aging process based on emigration, particularly great impact has the age structure of the migration contingent in Germany, Italy and Switzerland. This is confirmed by the indicators for the proportion of the age groups 0-19 and 20-39 years in the migratory contingent, which in 2014 amounted 28.0% and 39.5%, respectively. These population indicators in the Republic of Macedonia are 23.3% and 30.7%. According to the participation of the persons aged 0-40 years in 2014, the Macedonian citizens abroad are in the third stage - demographic maturity, while the population in the Republic of Macedonia is in the fifth stage - demographic old age.[14]

In the context of population ageing process, particular attention deserves the indicators of age dependency ratio - total, of the young and of the old persons. According to the population estimates in the Republic of Macedonia these indicators in 2014 amounts: total age dependency ratio 41.8%, the youth dependency ratio 23.8%, and the elderly dependency ratio 18.0%. For the migration contingent in the three analyzed countries these indicators are: 34.3%, 28.4% and 6.0%. The differences are evident and confirm the impact of emigration on the demographic aging in the country.

The intensive population aging in the Republic of Macedonia implies growing problems in different domains. One of them is greater burden of the pension system based on paid contributions, especially in terms of lower age limit for retirement and increased pressure on the public finances.

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Conclusion

Based on the analyses made in this paper several conclusions can be made. The migration statistics of the Republic of Macedonia is relatively poor, because there are no relevant data for the scope, demographic and socio-economic features of the population that have left the country. On the other hand, the foreign data sources are limited and very often incomplete. For that reasons it is very difficult to make complete analyses of the emigration abroad.

Considering the available data sources (State Statistical Office of the Republic of Macedonia, the World Bank, OECD and Eurostat) it can be concluded that the emigration rate in the country is very high and ranges from 27% to 30%. Also, the permanent emigration remains relatively large, while the temporary migration for employment abroad, the migration for family reasons, for study or for other reasons is noticing a significant growth and mostly is transforming into permanent emigration. The established migration networks in the last two decades, are one of the main reasons for the continuous and rapid growth of the emigration from the Republic of Macedonia in the three analyzed countries. The intensified emigration and the large scope of the migration contingent has a growing impact on the demographic changes in the country.

The relevant data from foreign sources are showing that Germany, Italy and Switzerland have relatively great share of the Macedonian migration contingent. Their share in the total number of Macedonian citizens all over the world amounts more than one quarter, and more than three quarters in the European receiving countries. For that reason, they could be taken as a good example for identifying the demographic consequences of the emigration abroad.

The demographic structure of the migration contingent in Germany, Italy and Switzerland is characterized with significant changes. In that context, the analyses of the gender structure show stable increase of the share of the women. The age structure of the Macedonian citizens abroad, observed through the participation of the large age groups, in the three analyzed countries, is more or less different. However, it is characterized with nearly similar changes. The share of children (0-14) was decreasing in all countries, the participation of the working age population (15-64) only in Germany and Switzerland, while the share of the old population 65+ is increasing in all three countries. These changes are indicating a continuous process of family

reunification of the Macedonian citizens and intensified inflow of the second and third generation.

The demographic consequences of the emigration of the Macedonian citizens in Germany, Italy and Switzerland is observed through its impact on the total population increase, natural population increase and the process of demographic ageing in the country. The analyses is showing that in these three countries lives a significant proportion of children, young working age population and the population of fertile age, which implicates negative influence on the total population increase in the Republic of Macedonia.

Regarding the consequences to the natural population increase, the analysis is showing that the common share of the live births abroad in the total live births in the country, in the period 2009-2014, is continuously increasing and in 2014 accounts for 13.6%. For the purpose of identifying the factors which influence the natural population increase of the migration contingent in Germany, Switzerland and Italy, the correlated component regression (CCR-LM) is used. This model overcame the problem of lack of large time series data and the presence of high multicollinearity among the variables. The results from the calculations are implying that the share of the Macedonian live births in these three countries of the total number of live births in the country, is significantly correlated with the increase of the share of total number of migrants in the in the total population of the Republic of Macedonia, as well as with the participation of women in these countries in the total women population in the Republic of Macedonia.

The demographic consequences on the demographic ageing process in the country are also very concerning. In situation, when the emigration of the young population is significantly intensified, the ageing process in the Republic of Macedonia is accelerating. With respect to that and with increasing old age dependency ratio, very soon, the country will face difficulties in the pension system and with increased pressure on the public finances.

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THE CONSTRAINTS OF SMEs IN THE REPUBLIC OF MACEDONIA IN THE PROCESS OF PUBLIC E-PROCUREMENT

Abstract

The public procurement process can be recognized as one of the crucial processes in developing countries. The most vital issues that need to be addressed with public procurement are the competitiveness, transparency and, accountability. With the developing trends of the digital economy, the process of public procurement also has developed into more efficient electronic procurement process. This paper addresses the impact of obligatory public e-procurement on small and medium enterprises in Republic of Macedonia. The main goal of this research is to indicate the advantages and constraints of public e-procurement process for the SMEs in Republic of Macedonia through the presentation of case study that is part of the process itself.

Key words: Public procurement, SMEs, electronic procurement, public e-procurement

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Introduction

Electronic commerce typically refers to selling goods and services via electronic channels such as the Internet, virtually everywhere on earth [1]. Other authors, however, define electronic commerce as automation of commercial transactions using computers and network communication technologies [2]. However, perhaps the most comprehensive definition of e-commerce is the one that says it is a process of purchase, sale, transfer or exchange of products, services and/or information via computer networks, including the Internet [3]. Regarding this definition, we can define different types of electronic commerce on the basis of different business models which e-commerce allows, and probably one of the most interesting and most used is the electronic procurement (e-procurement).

When organizations use information technology in conducting tendering or other forms of procuring products or services, they perform a process of e-procurement [4], [5]. It means the use of electronic methods through Internet for realization of the procurement functions such as: identification of requirement, payment and contract management [6]. In the last two decades, such e-procurement processes have brought greater efficiency, cost-savings and transparency, thus becoming extremely popular, especially with the fact that governments themselves are using them for public procurement [7].

Nevertheless, dealing with the e-procurement process itself takes special skills and training in the contemporary technology, as well as clear guidelines available to the users. Namely, small and medium sized enterprises (SMEs), though representing a crucial role in employment and the whole economy [8], may find it difficult to become suppliers in public procurement [9], [10]. Particularly this is the case with SMEs in Republic of Macedonia where 99.7% of all active businesses are SMEs [11].

The purpose of this study is to analyze the use of e-procurement by the SMEs and to assess the effects of the e-procurement on their business activities. The main goal is to answer to the following questions:

What are the long-term effects of the mandatory electronic auctions in the processes of the e-procurements on the SMEs in the Republic of Macedonia?

What are the most recent amendments to the Law on Public Procurement of Republic of Macedonia, or more precisely, what are their

effects on the activities of economic operators submitting their proposals, especially on SMEs?

1. LITERATURE REVIEW

The public procurements are activities of the public institutions in which they buy goods and services. The statistics says that these procurements represents, from one third of GDP in the developed countries, up to 50% of GDP in the developing countries [12]. It is obvious that public procurement plays vital role for SMEs and their survival, at the same time they attract great interest by the other stakeholders in the national economy on their transparency, implementation, effects, etc. This fact puts great importance on the procurements, additionally because public procurement means spending public assets, which implicates great focus on control and observation [13]. E-procurements increase the efficiency of managing public assets. They are differently organised in every economy. In some countries it only means using a web location as bulletin board for initiation of public business contracts [12]. In other economies for example, e-procurements are much more sophisticated and they have several phases, such as Requirement definition, Sourcing, Solicitation, Evaluation, Contracting and Contract Management [14].

The public e-procurement can be implemented following these three models:

1. The public model. Here, all tasks, including the investment and the risks in building the portal, are taken by the government upon itself.
2. The private model. Here, all tasks are taken by private entities that assumes the investment risks of the project.
3. The mixed model (Public-Private Partnership).

Regardless of the model used, public e-procurements have some general advantages [15]:

- Tangible or quantitative - easily quantifiable, as costs (order cost, administrative cost, lead-time order cost and opportunity cost of capital) and time savings that translate into improved effectiveness and efficiency of organization, as well as revenue increase resulting from access to new markets or new business opportunities; and

- Intangible or qualitative – for example, better integration of business processes, improved customer satisfaction, and better communication with other businesses that improve business relationships and so on, which are not so easily quantifiable.

However, despite the advantages of the e-procurements, there are some challenges which SMEs are facing while using public e-procurement. One type of challenges has external origin (technology, infrastructure and legislation, environment) and the other type has internal origin (resource constraints such as financial and human capital along with organizational and management characteristics such as organizational culture, decision maker's perception of risk and benefits of e-procurement system, company size, business type, organization structure and others) [16].

The exceptional importance of the e-procurements results with conducting institutional and practical measures in direction of rounding the whole process of e-procurements and all its elements. The European Union in its agenda for 2016 plan to introduce so called end-to-end model of public e-procurement. This model implies using ICT to cover the complete process of procurement, which starts with electronic publication of notices, and ends up with the electronic payment for the procured goods and services [17].

European Union has also envisaged publication of notices and tender documentation (e-notification) to become mandatory till March 2016, electronic submission of offers should become mandatory up to March 2017 (for contract notices published by governmental institutions on national level), i.e. up to September 2018 (for contract notices published by all contracting authorities); while electronic payments should become the predominant method of payment of obligations of public procurement procedures up to 2020. In spite of these deadlines for all member states for the mandatory introduction of the stages of the procurement process, a good portion of the countries so far have already implemented these four elements of the e-procurement (e-notification, e-access, e-submission and e-invoice).

Macedonian public procurements are implemented in accordance with the following basic principles outlined in the Law on Public Procurement: 1) competitiveness among economic operators; 2) equal treatment and non-discrimination of economic operators; 3) transparency and integrity in awarding public contracts; 4) rational and efficient use of funds in the award of public procurement, or the well-known concept of "best value for money" [18].

The first version of the e-Procurement system in Republic of Macedonia was officially launched in April 2006. Primarily, the e-Procurement system was envisaged and functioned as a system with limited capabilities. Today, the e-Procurement system has grown into a single computerised system, available on the internet (https://e-nabavki.gov.mk), which is used to enable greater efficiency and cost-effectiveness in the field of public procurements. The system actually is publicly accessible web site managed by the Public Procurement Bureau that offers the possibility to completely treat the tender via the web site. Since 2008, it belongs to the stage 4 of online availability (which is the maximum for this type of services). It means that: case handling, decision and delivery of a standard procedure to tender can be treated completely via the web. So, since then, no other formal procedure is necessary for the applicant via "paperwork". In other words, the online sophistication for the e-Procurement application is a hundred percent (100%) [19].

The electronic system for public procurement – ESPP in Macedonia, in 2014 was used by 1,390 contracting authorities and more than 4,800 active economic operators. There were 15,738 contract notices of different type and 22,022 contract award notices of different type published in 2014, and the total number of published tender documents was 15,684, and 29,477 e-auctions carried out, which is more than 112 e-auctions daily in average. 21,938 public contracts were awarded in 2014, amounting to 60.4 billion MKD or more than 980 million EUR, which is arround 34% of the Budget and 12% of GDP, and compared to the previous year (year 2013) the total value is increased by 15%. The distribution of the number and the value of the concluded contracts over categories shows that most of the contracts in 2014 (15,652 contracts) belong to the category of SMEs – 48%. In facts, value share of the large companies accounts for 35% (3,241 contracts), while micro companies account for the least – 5% of the total value of the public procurements (2,967 contracts concluded), keeping in mind most of them fall in the simplified competitive procedur limited to 5,000 EUR [20].

The effects of the public e-procurement system in Republic of Macedonia are considered as both positive and negative at the same time. Some think that they are the easement cure to painless public procurement, but the ones who were really unprepared for these changes were the small and medium sized enterprises, and especially the micro enterprises.

2. RESEARCH

2.1. Methodology

Case study methodology that reinforces the theoretical knowledge on electronic public procurement and the problems faced by SMEs in the Republic of Macedonia is used in this study. The case study is based on the Prima, the company based in Skopje, Republic of Macedonia. Interviews were conducted with the Chief Operating Officer and with the financial director of the company (on 04.07.2015) and with the direct participants in public procurement - employees in the company who prepare offers for participation in public procurement contracts (on 04.08.2015), for collecting information for this case study. Additional information was gathered by reviewing a large number of documents, financial reports, analyses and reviews that have been prepared by employees of the enterprise, which are focused on the various aspects of company's operations.

2.2. Analysis and interpretation of the results

Prima was founded in 1999 and has main activity in sale and servicing of equipment for clinical and industrial use, supply of reagents and consumables in the field of biochemistry, immunology, microbiology, chemistry, and sales of pharmaceutical products, laboratory appliances etc.

It is a small company with 26 employees (in December, 2014), with an annual turnover of 4,084,748 Euros and the value of the balance sheet of 3,702,375 Euros. The number of employees is changing in the last fifteen years as it is shown in Table 1.

Table 1 – Number of employees in Prima Company (1999 - 2014)

Year	Number of employees
1999	4
2004	7
2005	10
2007	14
2010	17
2011	21
2012	21
2013	24
2014	26

Source: Own research

Prima collaborates primarily with state institutions in the field of health care: health centers, public health centers, hospitals, clinics, etc. This means that participation in procedures for the grant of public contracts is the most common and most important business of this company. Table 2 shows the number of submitted offers (bids) for the procedures of awarding public procurement by the company for the period from January 2009 to December 2014.

Table 2- Number of offers submitted by Prima in procedures for awarding public procurement (2009 - 2014)

2009	2010	2011	2012	2013	2014
289	274	221	371	444	368

Source: Own research

From Table 2 we can noticed the increased number of offers for awarding a public procurement in 2013, when a total of 444 offers were submitted, compared to all other analysed years, which is caused by the fact that at the end of 2013 the Law on Amending the Law on Public Procurement has passed [21], according to which, crucial changes in the public procurement process in Macedonia, especially in the health sector were made. As a result of that so many contracting authorities rapidly reported their tenders before the changes provided by this Law came into force.

Prima's income comes from sale of products and services to healthcare organizations via public procurement procedures, so the mandatory introduction of electronic auctions which represents a iterative process of negative bidding of the participants in the electronic public procurement (auction bidders), contributes to reducing the originally submitted offers and consequently to reduced earnings of the participating companies. Also, with the introduction of lowest price as the single criterion for selecting the best offer, the situation for SMEs deteriorated further, because the quality no longer plays a major role in this type of procurement and the bidders strive to reduce the quality of the offered products in order to reduce their prices.

Despite the changes, Prima still offers the products with premium quality to its customers, although there are a large percentage of lost sales of certain products and also lower income, because of the decrease in the prices caused by huge competition through the electronic auctions. Table 3 shows a reduction in prices of certain commodities which are seen in the participation of Prima electronic auctions in the last three years.

Table 3 - Prices of the products held in electronic auctions for awarding a public procurement of a general hospital in Macedonia

#	Name of the product	2012	2013	2014	% decrease of the prices (2012-2014)
		*The prices are given per milliliter, in MKD			
1	CHOLESTEROL	**2.87**	**2.79**	**2.22**	22.6
2	TRIGLICERIDI	**3.15**	3.02	**2.42**	23.2
3	VAKUM EPRUVETI SEDIMENTACIJA	6.78	6.05	**5.50**	18.9
4	VAKUM VILES SERUM	4.82	4.53	**3.30**	31.5
5	VAKUM VILES K EDTA	5.00	4.45	**3.30**	34.0
6	CALCIUM	**0.70**	1.26	**1.26**	(-80.0)
7	PHOSPHOR	**1.44**	1.28	**0.98**	31.9
8	MAGNESIUM	**1.43**	1.60	**1.26**	11.2
		* The prices are given per liter, in MKD			
9	SULFURIC ACID 95-97%	500.00	351.54	**262.23**	47.6
10	METIL ALKOHOL	300.00	264.74	**259.47**	13.5
11	GLUCOZA ANHIDRID	1,100.00	807.24	**795.15**	27.7
12	ORTOFOSFORNA K-NA	1,000.00	699.61	**682.99**	31.7
13	HCL CONCENTRATED	400.00	308.14	**301.32**	24.7
		* The prices are given per test, in MKD			
14	Immunological tests ASO	**5.69**	**5.35**	**5.00**	12.1
15	Immunological tests CRP	**4.26**	**3.92**	**3.62**	15.0
16	Immunological tests RF	**3.65**	**3.42**	**3.11**	14.8

Source: Own research

Prices given in Table 3 were last offered prices from Prima Company. Reduction in the prices from 2012 to 2014 is evident in the all presented products. It is important to stress that prices marked in red (bold and underlined) are products that Prima has lost in the proceedings for awarding a public contract or through electronic auction, while other items are those which Prima was granted the contract for their procurement. In all of the marked products fall in prices in 2014 compared to the price of these products in 2014 is noted, except for the item under number 6, who shows price growth in 2014 relative to the price in 2012 by 80%. The reduction in the prices of the products ranges from 11.2% (for item under number 8), to 47.6% (the item under number 9). Five of the 16 products from the list have their prices decreased by 30% or more.

During the interview with the Chief Operating Officer of the Prima, it was stated that the enormous price reductions by other bidders (the competition on the e- auctions) is a result of lack of practice of valuing quality standard for suppliers (bidders) in Republic of Macedonia, and because there are suppliers who have inadequate warehouses for storage of the products, inadequate transport vehicles, and hence arises the possibility of these suppliers to reduce the prices, since they don't face real costs for all economic and business parameters, as is the case with the company Prima. This is especially important to emphasize because with this type of products (chemicals, reagents, etc.) a special treatment for storage, warehousing and transportation to the final consumer is required.

For the same period for which the prices of the products sold in the auction are analyzed, prices in foreign markets, i.e. prices from foreign suppliers of those products are increasing every year. This further complicates the situation in the Republic of Macedonia for the companies that sell the same products in public institutions through public e-procurement. All this, together with increasing of the other operating costs of the enterprises (including customs, transportation, etc.), determines the decline of the profits in the sector.

Another amendment to the Public Procurement Act of 2013 makes additional difficulties of enterprises that deal with the sale of medical products and equipment. Namely, the amendment directs for the mandatory use of the principle of "one item - one part" in order to allow maximum competition between economic operators in procurement of medicines, medical devices and medical supplies. Therefore, in 2013 (with entry into force 1.1.2014 year) when this change in the law was introduced, the number of auctions (due to

a huge increase in the number of products exposed to individual e-auctions) dramatically increased (Table 4).

Table 4 – Total number of e-auctions in which the Prima Company participated (year 2011 till 2014)

Year	2011	2012	2013	2014	Total
Number of e-auctions in which the company participated	/	1960	3666	6383	12009

Source: Own research

From Table 4, a significant increase in the number of electronic auctions in 2014 compared to previous years can be seen. This is a result of the introduction of the amendment in the Act which refers to the principle of "one item - one part". This increase in the number of electronic auctions for company Prima reflects the need for additional resources in the context of a more sophisticated and faster IT equipment required for uninterrupted monitoring of e-auctions, because simultaneously 5-6 e-auctions can be held and that presents a significant need for additional human resources, because sometimes 60 e-auctions are held daily. On the other hand, this amendment for tender separation of this kind, for Prima and other enterprises operating in this sector, presents an opportunity for participation of many procedures and overcome the problem of "lockout" specifications, as for one item, that the company does not have its range of products, could not take part in the whole proceedings (lockout).

The current state of the participation in public e-procurement, and also in the overall business performance of the enterprise is furthermore complicated by debts held by contracting authorities to the company Prima. In this enterprise almost 90% of invoices are not paid on time from the contracting authorities, in public procurement procedures. With the entry into force of the Law for financial discipline, which now applies only to private sector enterprises, (public organizations will start to apply from January 1, 2016), the situation with unpaid debts of private institutions is significantly improved. But because a large proportion, almost 70% of the work of Prima happens with public organizations as contracting authorities, this problem is still much articulated.

Prima Company has developed a strategy for debt management with contracting authorities which tends to collect some of the unpaid debts before taking serious actions to these debts. The main action is to make constant contact through telephone calls and written correspondence claiming for debts and signing agreements for payment of debts on time. If none of these measures work or helps to settle the unpaid debts, Prima appeals to the contracting authorities. Thus, from January 2014 to of December 2014, Prima has filed 11 lawsuits for recovery of their claims by the state institutions of the health sector. All these claims are payable, i.e. Prima possesses all evidence that the goods and services are received and signed by the recipient. In 50% of the lawsuits, the institutions that are being sued do not dispute the debt; in such cases the debts are resolved more quickly. But in the other half of cases, the contracting authorities dispute the debt, after which a trial must be held that may last for several months, and often even years. It is inevitable that in these cases the debt will ever be paid, but this process is considerably slower and contributes to generating additional costs in terms of time and resources committed by the company. Out of the 11 lawsuits filed in 2014, all of them ended in judgment in favor of Prima, but the recovery of the debt is still not completed in all cases.

All this leads to additional negative effects on the Prima's business operations. The company needs to take commercial loans and to pay the interest, to be able to procure goods offered and implemented in other procurement procedures. Also, additional issue is the engagement of people dealing with the recovery of unpaid debts.

Conclusion

The findings point out that SMEs in Republic of Macedonia facing difficulties with the public procurement procedures. Partly, because they are small and medium and thus lacking resources, i.e. people, equipment, funds, support, and partly because of the procurement system itself. The introduction of lowest price as the only criterion for awarding the contract causes enormous dropping in prices. This threatens the existence of the SMEs, its growth and the quality of products and services sold through the public procurement procedure. The end effect of this kind of procurement has twofold projection: the "positive" one regarding saving of public money

(taking into consideration the entire expenditure, this can be quite disputable), and the negative one, i.e. disabling SMEs to make decent profits which could be a solid base for the growth of their businesses.

Having a healthy and sustainable public procurement system means redesigning (put the focus on economically most advantageous tender criteria instead of lowest price criteria for awarding the contract), reinventing the system (ease of access and use) and make the Law for financial discipline obligatory for private and public organizations.

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19. Janevski, Z. (2011). 'e-Procurement in the former Yugoslav Republic of Macedonia: User Satisfaction', ePractice Workshop "eProcurement in the Time of Economic Crisis", 25 May 2011, EC, Directorate General for Informatics, Brussels, Belgium.

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SMEs OPEN INNOVATION MANAGEMENT: STRATEGY MAP FOR INNOVATION DRIVEN COMPANY

Abstract

Over the last few years the open innovation paradigm has gained significant attention among many researchers who are studing on strategic management and innovation. Current research emphasizes that companies adapt their business models to profit not only from internal but also from external knowledge and ideas. The aim of this article is to help the management team to cope with the use of the balanced scorecard for implementation of open innovation strategies in small and medium-sized enterprises (SMEs). One of the ultimate goals is the construction of strategy map and inclusive measures of open innovation management. The implementation of open innovation strategies in small and medium-sized enterprises is a complex, mental and a highly professional activity that is directed towards the determination of the future objectives for the company growth. Hence, in a broader sense, this paper has to formulate the need for using the balanced scorecard as a guiding principle to build a strategy map, draw up an action plan for measuring key drivers as well as determine of critical success factors aimed at open innovation driven company.

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Key words: Balanced Scorecard, Open Innovation, Strategic Management, Strategy Map

JEL classification: M10, O31

Introduction

With a move from industrial economy towards an economy that is now mainly considered by intangible assets, such as knowledge and innovative competence, companies have to manage increasing level of complexity and uncertainty. "Innovation is no longer sole of company's research and development division. Companies that have mastered innovation – well known leaders such as Apple, BMW, Google, Netflix and Procter and Gamble, have gone beyond R&D to ensure that innovation is an integral part of their organizations and their extended – value chains. In doing so, these companies have not only achieved notoriety but also significant and valuable competitive advantage."[3] Innovation is critical to stretch a competitive advantage for SMEs, particularly in the era that is followed by a major increase in competition among SMEs and spectacular global market change.

Open innovation means pulling idea from myriad sources and understanding that each contributor brings a different perspective to the table. Most of the small companies are underfunded. Also, they need to be inventive with allocation of their limited resources. Furthermore, challenging the rising competition and fronting the growing R&D and innovation costs, small but also medium-sized enterprises can no longer live on their innovation efforts. They need to change their business model to embracing strategies of collaboration, rather than competition. Open innovation is a paradigm that assumes that companies can use external ideas as well as internal ideas to advance their technology[4].

The successful implementation of the scorecard method should translate a company's mission and vision into a comprehensive set of performance indicators[5].

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[3] A.T. Kearney, Inc. 2008. "Innovation Management: Strategies for Success and Leadership." http://www.atkearney.com/documents/10192/23b911ad-0067-4c30-8fc0-c57ac7d1eef5
[4] Chesbrough, H. 2011. *Open Services Innovation: Rethinking Your Business to Grow and Compete in a New Era.* San Francisco: Jossey Bass.
[5] Kaplan, R. S., and Norton, D. 1993. "Putting the Balanced Scorecard to Work." *Harvard Business Review* 71, no. 5 (September–October): 134–147.

It is very important to point out the need for companies' strategy which is comprised by open innovation approaches. Our proposed innovation management tool is a balanced scorecard that integrates innovations (open) indicators with strategic goals and projects in organizations. Therefore, the balanced scorecard (BSC) can be studied not only as a simple and useful tool to track companies' performance but also as a strategic innovation management tool. In the knowledge – based innovation economy which is indicated by intellectual capital contrary to physical assets, the balanced scorecard has to incorporate growing trends of innovations and adjust itself towards an open innovation era.

Hence, in a broader sense, this paper has to formulate the need for using the balanced scorecard as a guiding principle to build a strategy map, draw up an action plan for measuring key drivers as well as determine of critical success factors aimed at open innovation driven company. The paper is structured as following: In section 1 we briefly introduced the open innovation concept, focusing on the innovation driven small and medium-sized enterprises (SMEs). Afterwards, we discuss the need for using the balanced scorecard as a guiding principle for implementation of open innovation strategies in small and medium-sized enterprises (SMEs). Section 3 identifies key success factors and key performance indicators in each of the dimensions as well as determine of critical success elements aimed at open innovation driven company. Section 4 discusses how to build a strategy map using the balanced scorecard model. Finally, we conclude and debate contributions of our study.

1. OPEN INNOVATION AND SMALL AND MEDIUM-SIZED ENTERPRISES (SMEs)

Usually, big organizations trusted on their own R&D divisions and support an idea about closed innovation model, where all innovations are under company's influence. The open innovation paradigm is a novel innovation strategy by which companies go beyond their R&D's innovation projects. Innovation outline is about illustrating how to bring innovations that add value to companies and customers[6]. In contrast to the closed innovation model, combining inflows and outflows of knowledge, these organizations

[6] O'Sullivan, D., and Dooley, L. 2009. "Applying innovation." *Thousand Oaks, CA: SAGE Publications:* 3-33.

are open to share ideas with many stakeholders (customers, vendors, other organizations, employees, institutes and universities). Open innovation is already being adopted by large-sized and small and medium-sized companies. From technological point of view, open innovation is also by this time adopted by high-tech as well as low-tech industries.[7] For SMEs, open innovation can mean cooperation with other small and medium-sized companies, providing relationships to jointly develop new services or products. SMEs do have the capacity for radical innovations – not just large companies. [8] The companies that have a tendency to use open innovations effectively, are those that are willing to combine both traditional model of innovation (i.e., internal) with open innovation forms, but do it with a combined set of new processes.

Makeover towards open innovation strategy needs essential changes of SMEs to transfer from closed to open innovation. Also this means that some of the innovations principles requires fundamental changes. Mainly, the principal "the smart people in the field work for us" should be transformed to new principal "we need to work with smart people inside and outside the company". "We should control our innovations, so that our competitors don't profit from our ideas" be supposed to be converted to "we should profit from others' use of our innovations, and we should buy others innovations whenever it improve our business model". The other principal that saying "if we create the best ideas in the industry, we will win" has to be changed with new one "if we make the best use of internal and external ideas we will win". Lastly, "the company that gets an innovation to the market first will win" should be changed by new principal "building a better business model is better than getting to the market first".

In order to successfully achieve open innovation in practice at SMEs, innovation approach has to be incorporated in the corporative strategy. It extends not only to creating a company where innovation can bloom, but also providing clear directions about the goals, scale of innovation that is required to deliver the strategic goals of the business.[9] Therefore, management innovation system is needed as a framework that emphasizes the importance of open innovations. It helps translating innovation strategy into actions. We have argued in this article that the balanced scorecard provides a framework

[7] Drechsler, W., and Natter, N. 2012. "Understanding a firm's openness decisions in innovation."*Journal of Business Research,* Vol. 65, No.3: 438-445.
[8] Acs, Z., and Audretsch, D.B. 1987. "Innovation in Large and Small Firms." *Economic Letters* 23: 109-112.
[9] Nada, N., Turkyilmaz, A., and El-Badawy, A. 2011. "SMEs Innovation Management Framework". *Fatih University:* 3-5.

and enough flexibility for managing the implementation of open innovation approach at small and medium-sized enterprises while also facilitating its main functions:

- translation of company strategy and strategy objectives into actionable goals;
- communicating strategy through the organization;
- setting targets and actions to achieve those targets;
- reviewing performance and feedback about the strategy implementation.

2. USING THE BALANCED SCORECARD FOR MANAGING OPEN INNOVATION IN SMEs

The balanced scorecard (BSC) is a strategy-focused approach to performance the management that includes measures resulted from the organization's vision and mission. It is also a powerful management tool for strategy execution and useful measurement tool to track companies' performance.[10] BSCs include objectives, measures, targets and initiatives in grading of four perspectives such as financial, customer, internal business process and learning and growth. At the highest point of the framework is financial performance, which is determined by a customer value proposition. This is in close connection with the right set of business processes. At the base of the framework is learning and growth, which provide the capabilities and infrastructure for a continually evolving value proposition and processes.[11] The balanced scorecard lets managers to introduce four new processes that contribute to linking long-term objectives with short-term actions. All of them helps managers to build consensus about company's vision and mission, to communicate their strategy trough the organization, to integrate their business and financial plans and feedback and learning which gives companies the capacity about strategic learning.[12]

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[10] Kaplan, R. S., and Norton, D. 1996. *Translating Strategy into Action: The Balanced Scorecard*. Boston: Harvard Business School Press.
[11] Frigo, M. L. 2002. "Strategy and the Balanced Scorecard." *Strategic Finance,* Vol. 84 Issue 5 (November): 3-6.
[12] Kaplan, R. S., and Norton, D. 1996. "Using the Balances Scorecard as a Strategic Management System." *Harvard Business Review,* (January–February): 75-85.

Organizations of all sizes have benefited from the management tools and concepts that come with the balanced scorecard - a system for managers to communicate and monitor the progress of their business strategies. Balanced scorecards are also appropriate for SMSs. But for many small and medium-sized enterprises the concepts of the balanced scorecard get idealistic because they assume its design and implementation demand the budget, manpower and know-how of a large organization to be successful. Therefore, the small business should think about the balanced scorecard in a different way to the multinational, there is possibility that the balanced scorecard might be even more influential for the SMEs than it is for the large organizations. Moreover, SMEs should be able to implement BSC more quickly, as there are fewer people and less complex organizational processes. Many small and medium-sized companies have used individual approach to implementation of balanced scorecard in order to achieve more rational result.

In scholarly literature, many articles communicate the limitations of the balanced scorecard in the innovation economy. Mainly, they share opinion that the traditional BSC is neither appropriate nor useful to measure the innovations outcomes when implementing an open innovation model.[13] Furthermore, the other limitations show up when companies need to collaborate with external partners to develop new solutions.[14]

Beside above mentioned remarks about the limitations of the balanced scorecard in the era of the innovation economy, this paper has to formulate the need for using the balanced scorecard in its traditional frames as a guiding principle to implement an open innovation initiatives at SMSs. In the following, some small adaption of the existing framework is needed for effective and successful usage of the BSC in implementation of open innovation strategy at SMSs. Therefore, we are proposing amendments to the balanced scorecard method to use it in open innovation projects. To better support the implementation of an open innovation strategy together with the overall business strategy in SMEs, we propose adaptations to the existing four perspectives in terms of their objectives, measures, targets and actions that would be more oriented towards open innovations. Also, it is suggested that creation of the new fifth perspective, "open innovation and collaboration" will more adroitly and explicitly communicate a company's intended open innovation strategy. Exhibit 1 depicts open innovation balanced scorecard

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[13] Chesbrough, H. 2006. *Open Innovation: The New Imperative for Creating and Profiting from Technology.* Boston: Harvard Business School Press.
[14] Voelpel, S. C., Leibold, M., and Eckhoff, R. A. 2006. "The Tyranny of the Balanced Scorecard in the Innovation Economy". *Journal of Intellectual Capital,* Vol. 7 No. 1: 43-60.

for SMEs. The description of a separate open innovation and collaboration perspective in Exhibit 1 suggest that a company develop goals and measures that directly communicate and highlight the firm's open innovation strategy. The specific goals and measures will naturally differ across companies as companies will have differing core competencies and abilities to compete. Nevertheless, some general issues for which goals and measures can be developed can be addressed as a starting point.
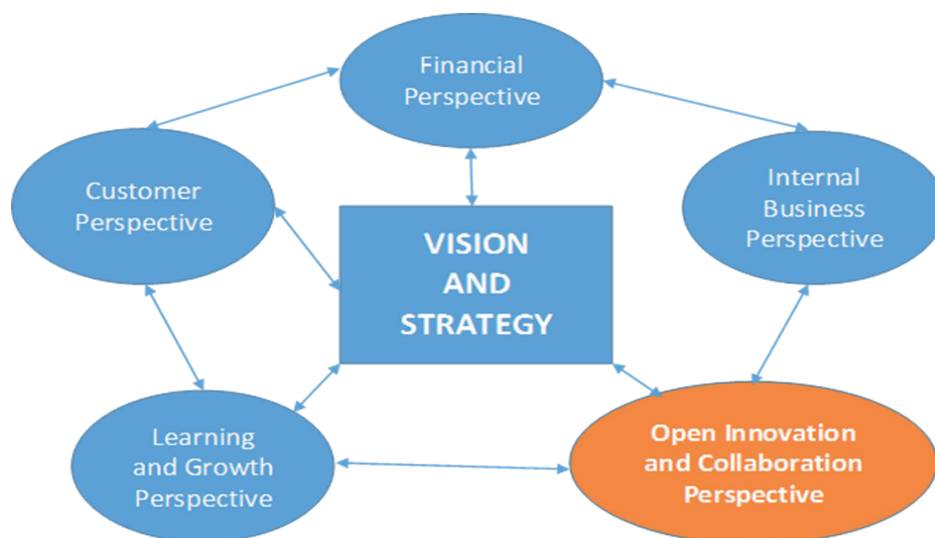
Exhibit 1. *Adjusted Classic Balanced Scorecard: Five Perspectives*

Exhibit 2 depicts some suggested goals and measures that can serve, at a very least, as that starting point. The fifth perspective, innovation and collaboration, emphasizes a joint idea generation among different partners such as companies, universities, customers, institutes and suppliers and new value creation by developing novel products and services, processes and intangible assets in a small and medium-sized companies. Depending on the specific open innovation strategy, managers need to adopt indicators and create new ones that reflect the company strategy. Furthermore, managers need to outline casual relationships between all five perspectives.

Also, this part describes in detail the necessary steps for the implementation of the balanced scorecard for open innovation in SMEs. At a beginning, the first step was to create a common understanding of the original concept of the balanced scorecard through literature.

Exhibit 2. *Open Innovation and Collaboration Perspective - Goals and Measures*

Issues Requiring Goals	Critical Success Factor
(1) Collaboration with different partners	- Collaboration with universities partners (per year) - Percentage of projects driven by customers, suppliers and other partners - Partner turnover rate
(2) Innovation capability of the company	- Lunch of new products and services based on external ideas (a) - Percentage of realized external ideas (b) - External patents usage rate (c)

Sources: (a) (c) Chesbrough (2006); (b) Kaplan and Norton (1996).

First, Robert Kaplan and David Norton introduced the technique in a 1992 Hardwar Business Review article. Meanwhile, numerous papers and researches have been conducted to improve the original BSC to different companies. Mainly, a number of articles and books have discussed the advantages and its application in the profit sector[15]. Among the numerous successful users are: AT&T, Intel, Brown and Root, Deutsche Telekom and famous adopters in the service sector include the international accounting firms Ernst and Young and KPMG and many other companies in different fields of the industry. Since BSC is also appropriate for small and medium-sized companies, a sound understanding about the implementation of the balance scorecard in SMEs is required. The second step aimed at achieving a good understanding on the open innovation paradigm and performance impact of open innovation for SME's and to find out what the possible inputs for the BSC are based on this step. The small and medium-sized companies are pertinent source of innovation within the international system. They have the capacity for new innovation equal to the large-sized companies. However, they differ from those of big companies because they are more flexible, less formalized with limited financial resources. [16] The third step aimed at gaining more inputs for the new BSC based on questionnaire and interview executed internally and externally. The fourth step was to find out what the possible

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[15] [8], [10], [11], [12], [13], [14], [15], [18], [19].
[16] Freeman, J., and Engel, J. 2007. "Models of Innovations: Start-ups and Mature Corporations." *California Management Review,* Vol. 50 No. 1: 94-119.

inputs for the BSC are based on previous steps, define the key success factors and formulate a preliminary balanced scorecard containing operational measures for the strategic objectives. The final step described the final design of the balanced scorecard.

3. KEY PERFORMANCE INDICATORES - MEASURING AND MANAGING OPEN INNOVATION IN SMEs

KPI's provide a good foundation for informed discussion and decision making process. They are the pointers which need to be measure, to be identify how well internal and external process are performing, and to contribute in a way to predict what will happened in the future. For each balanced scorecard's perspectives is exposed in Exhibit 1 has objectives to accomplish and there are certain relationships among them. The strategic mapping and linking of the variables helped the small and medium-sized companies to spell out the objectives, the drivers and the relevant metrics for the objectives. Some of the most applicable key performance indicators (KPI's) as a part of the measures element suggested to track and asses the performance of open innovation initiatives carried out at SMEs is shown in Exhibit 3. [17]

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[17] Magyar, A. 2008. "Measuring Impact of Research Projects on Company Performance. "M.Sc. Thesis, Cranfield University.

Exhibit 3. *Scorecard for Strategic Theme: Key Performance Indicators for Open Innovation in Small and Medium-Sized Companies*

Perspective	Objective	Measure
Financial	Profit growth Maintain revenue market share	- Percentage of cost savings based on new product / services lunch - Annual budget invested in collaborative project - Turnover using patents - Gross profit of the new product developed based to the collaborative project - Volume of cost savings based on share services -"Low hanging fruits" - Percentage of revenue market share based on retention & loyalty programs
Customer	Add high value customer Retain high value customers	- Number of loyalty programs introduced together with the partners - Profit per retain customer - Time – to – market - Introduced share services together with external partners - Customer satisfaction ratio (Trim index) conduct with external company - Acquisition cost per new customer
Internal process	Continue leadership in existing products Build leadership in new products / services Creation of infrastructure to improve capabilities to absorb external ideas	- Number of new products / services develop by the company per year - New retention program developed together with the partners - New technology introduced with partners together - Number of new services preferred by customers
Open innovation and collaboration	Collaboration with different partners Innovation capability of the company	- Collaboration with Universities per year - Percentage of projects driven by customers, suppliers and other partners - Partner turnover rate - Percentage of realized external ideas - External patents usage rates

Perspective	Objective	Measure
Learning and growth	Train people to build skills and general competencies Acquisition of the talented stuff Openness of the company Motivation of the partners	- Training programs per employee - Number of the new highly skilled employees per year hired - Number of collaborative projects in the company per year - Number of awards to the partners for their contribution to the mutual products / services / technology

Sources: I. M. Pandey, "Balanced scorecard: Myth and Reality", 2005 – **adjusted scorecard towards open innovations in SMEs**

Balanced scorecard should not just be collections of financial and nonfinancial measures, structured in three to five perspectives. The best balanced scorecard reflect the strategy of the organizations. Strategy scorecards along with their graphical presentations on strategy maps provide a logical and comprehensive way to describe strategy.[18] Hence, they have to communicate clearly the SMEs desired strategy towards open innovations and its hypothesis about how these outcomes related to the open innovations can be achieved.

4. STRATEGY MAP FOR INNOVATION DRIVEN COMPANY

Traditionally the balanced scorecard are presented in two formats: either as a "scorecard" or alternatively as a "strategic map" as pointed on Exhibit 4. The strategic map concept has been introduced in order to help organizations in their efforts while they are linking different performance indicators[19]. The strategic map also shows the linkages and interaction between various variables. The strategic map additionally defines logical cause-and-effect linkages between dissimilar aspects in the organizations. It is believed that when strategy is shown systematically in a map, it increases the chances of its success[20]. Exhibit 4 depicts some suggested adaptations to the existing four perspectives in terms of their objectives, measures and actions that would be more oriented towards open innovations. Also, it shows the new fifth perspective, "open innovation and collaboration" together with its linkages and cause and effect relationships.

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[18] Kaplan, R. S., and Norton, D. P. 2001. "Transforming the Balanced Scorecard from Performance Measurement to Strategic Management: Part I." *American Accounting Association*, Accounting Horizons, Vol. 15 No. 1: 87-104.
[19] Kaplan, R. S., and Norton, D. 1996. *Translating Strategy into Action: The Balanced Scorecard*. Boston: Harvard Business School Press.
[20] Kaplan, R. S., and Norton, D. P. 2001. "Transforming the Balanced Scorecard from Performance Measurement to Strategic Management: Part I." *American Accounting Association,* Accounting Horizons, Vol. 15 No. 1: 87-104.

***Exhibit 4**. Strategic Map Linking for Strategic Theme: Strategic ap for Open Innovation in Small and Medium-Sized Companies*
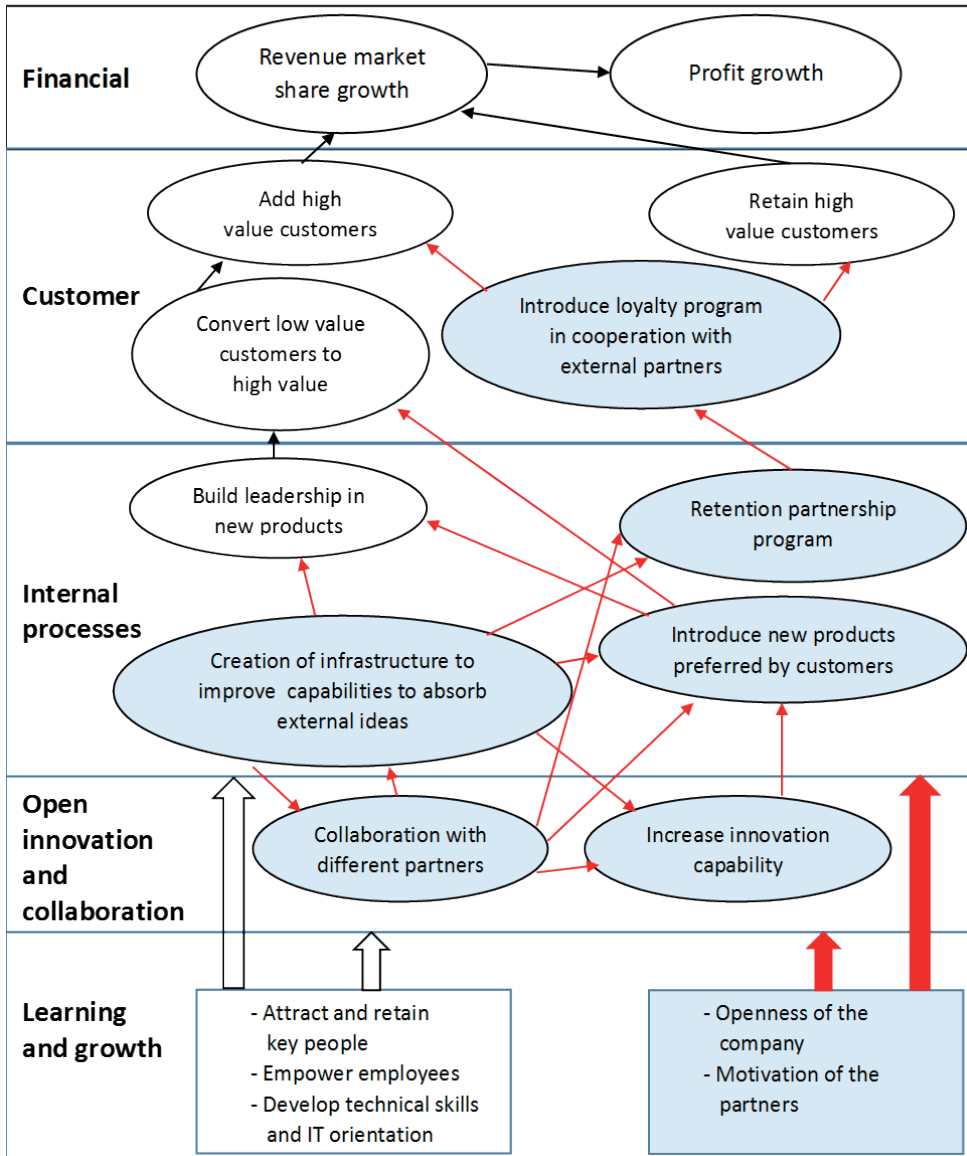
The chain of cause and effect should permeate all five perspectives of a balanced scorecard. For example, revenue market share growth maybe an outcome measure in the financial perspective. The driver of this financial measure could be retain high value customers, the result of a high degree of loyalty among existing customers. Investigates of customer preferences may disclose that loyalty program is highly valued by customers. Thus, loyalty program is expected to lead to higher customer loyalty, which, in turn is expected to lead to higher financial performance. The process is going on by determining what internal processes the company must excel at to introduce loyalty program. To introduce loyalty program, the business may need to realize retention partnership program and creation of infrastructure to improve capabilities to absorb external ideas, both factors that could be scorecard measures in the internal perspective. And how do small and medium-sized company improve capabilities to absorb external ideas and realize retention partnership program? By collaboration with different partners and increase innovation capability an objectives from open innovation and collaboration perspective. In fact, many collaboration models have emerged to achieve more innovations outputs under collaborative environments, such as virtual organizations or living labs.[21] Finally, openness of the company, motivation of the partners, attract and retain key people, empower employees are ultimate objectives and measures that would be a candidates for the learning and grow perspective. All above mention explain how an entire chain of cause-and-effect relationships can be established as a vertical vector through the five perspective of the balanced scorecard.

Conclusion

Meeting the many challenges for improvement will require SMEs to undergo fundamental changes and to continuously seek new ways to create future value. Our literature review specifies that transformation towards open innovation requires essential modifications of SMEs to move from close to open innovation. Our paper highlights that managing open innovation in SMEs implies the usage of a strategic managerial system in order to support open innovation strategy. In scholarly literature, many articles communicate

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[21] Flores, M., Al-Ashaab, A., and Magyar, A. 2009. "A Balanced Scorecard for Open Innovation: Measuring the   Impact of Industry-University Collaboration." *In Leveraging Knowledge for Innovation in Collaborative Networks*, Springer Berlin Heidelberg: 23-32.

the limitations of the balanced scorecard in the innovation economy. Mainly, they share opinion that the traditional BSC is neither appropriate nor useful to measure the innovations outcomes when implementing an open innovation model. In this paper we offered balanced scorecard in its traditional and original frames as a guiding principle to implement an open innovation initiatives at SMSs. To better support the implementation of an open innovation strategy together with the overall business strategy in SME's, we propose adaptations to the existing four perspectives in terms of their objectives, measures, targets and actions that would be more oriented towards open innovations. Also, it is suggested that creation of the new fifth perspective, "open innovation and collaboration" will more adroitly and explicitly communicate a company's intended open innovation strategy. The BSC implementation will support the SMEs effort to discover and maximize the benefits and impacts that innovation and knowledge management deliver on the organization competitive edge and their open innovation business model.

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   http://www.atkearney.com/documents/10192/23b911ad-0067-4c30-8fc0-c57ac7d1eef5.

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13. Kaplan, R. S., and Norton, D. P. 2001. "Transforming the Balanced Scorecard from Performance Measurement to Strategic Management: Part I." *American Accounting Association,* Accounting Horizons, Vol. 15 No. 1: 87-104.

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22. Voelpel, S. C., Leibold, M., and Eckhoff, R. A. 2006. "The Tyranny of the Balanced Scorecard in the Innovation Economy". *Journal of Intellectual Capital,* Vol. 7

No. 1: 43-60.

MARIJA MAGDINCEVA-SOPOVA [1]
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THE IMPACT OF CORPORATE ENTREPRENEURSHIP ON GROWTH OF THE COMPETITIVENESS OF ENTREPRISES

Abstract

The study and development of modern-corporate entrepreneurship is related to the meaning, the place and role of the concept of modern entrepreneurship in the operation of such enterprises that need to face the challenges imposed by the new conditions of operations. Global working conditions are forcing enterprises to act flexibly and constantly look for new ways of working and the concept of corporate entrepreneurship is a condition where enterprises apply new ways of working and relating enterprising. Enterprises are located in the new development phase which is characterized by discovering new job opportunities, introducing innovations, scientific discoveries, using modern technology in operation and change in the approach to employees.

In the applied part of the paper where a practical research was conducted through the method of a questionnaire which actually contains the elements of the model of corporate entrepreneurship such as autonomy, innovation, proactive, competitive aggression and risk-taking is the perceived

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E-mail: tanja.angelkova@ugd.edu.mk

in terms of the presence of the model enterprises. The results of the survey show that changes are needed in terms of organizational requirements for supporting innovative approach in operation, competitive market positioning and underwriters. Based on the result, ways are proposed for the integration of modern entrepreneurial process to the current processes in enterprises because the application of the concept of corporate entrepreneurship creates conditions for competitive performance of enterprises and achieving a competitive position based on the ability and knowledge of employees, management or entrepreneur.

Key words: corporate entrepreneurship, entrepreneur, competitiveness, innovation.

JEL classification: L030

Introduction

New technological processes create conditions for great flexibility in operation. Competition and changes in market conditions are causing rapid changes in all enterprises. Every enterprise must be prepared to constantly monitor the dynamic trend of change. The basics of the successful operation of enterprises are gaining a competitive edge by supporting innovative organizational culture and successful change management. The innovative business environment and good management of change management are key factors that companies transform uncertainty into certainty. In global working conditions, entrepreneurship is not a natural creative process, nor are entrepreneur's persons that are predefined as a result of congenital characteristics they possess. The concept of corporate entrepreneurship involves a situation in which enterprises apply new ways of working, new ideas within enterprises and entrepreneurial philosophy that covers the entire operation (Covin and Miles, 1999).

1. CORPORATE ENTREPRENEURSHIP AND CORPORATE ENTREPRENEUR

Modern-corporate entrepreneurship occurs with the emergence of capitalism, but the highest growth was recorded in the phase of liberal capitalism. Learning and development of this phenomenon are related to the meaning, the place and role of the concept of modern entrepreneurship in the operation of enterprises as a need to confront the challenges which impose the new conditions in operation. Unlike the traditional concept of entrepreneurship, corporate entrepreneurship contains the developmental dimension of ideas, capital and risk. Concepts such as intra-entrepreneurship, intra-corporate entrepreneurship, intra-corporate entrepreneurs, innovative and entrepreneurial strategies, level of entrepreneurial success and entrepreneurial orientation, are also used to define the phenomenon of corporate entrepreneurship (Antoncic and Hisrich, 2004). The concept of entrepreneurship is expanding the notion of entrepreneurship and entrepreneur as an individual and owner of the enterprise in general and relationships in the enterprise that thrive on teamwork.

The processes of corporate entrepreneurship are implemented within the existing way of work organization, regardless of its size, and these processes are not only creating new businesses, new ventures, but also extend to the development of new products, services, technologies, new management strategies and achieve a competitive position as innovation activities.

Enterprises are located in the new development phase that is characterized by discovering new job opportunities, introducing innovations, scientific discoveries, using modern technology in operation and change in the approach to employees. Successful enterprises connect knowledge and experience of the employees with the strategy and planned innovations due to improving profitability, growth and realize better results of operations.

The ability to create something new cannot possess every entrepreneur, but only those who have the knowledge and ability to implement the new ideas and ways of working. Corporate entrepreneurs are those employees who realize new business ventures, innovation of product or service, process innovation, risk taking and expressed competitiveness. The need for new products also supports the development of corporate entrepreneurship as it forces enterprises to think about the possibilities providing new products. Modern theory suggests that not enough only for new ways to combine resources, but it is necessary

to create new resources (Drucker, 1996). The basis for the application of the concept of corporate entrepreneurship in enterprises is the implementation of an adequate organizational structure that fosters entrepreneurial behavior and focus on innovation and flexibility to change and market demands. Corporate entrepreneurship is a new management philosophy that promotes to promote strategic agility, flexibility, continuous creativity to change the orientation of the administrative staff to intra- entrepreneurs. (Kraus &Kauranen, 2009). Enterprises that implemented the concept of corporate entrepreneurship, means that they are practicing entrepreneurial, innovative culture of behavior, and are willing to continuously introduce changes in the organizational structure ,as well as changes in the mindset of all employees, managers and employees of the company.

2. SPECIAL FEATURES OF CORPORATE ENTREPRENEURSHIP

Promotion of work is challenging, desired state and the basic goal of any enterprise. Enterprises continuously meet the challenges of rapid and constant change, new technology, globalization, global crises and so on. To survive and grow enterprises , they constantly seek new opportunities in the global market. Global operating conditions are forcing modern enterprises and entrepreneurs for constantly seeking new solutions to achieve or maintain their competitiveness which represents the basis for success of any enterprise. Corporate entrepreneurship, one of the important sub-areas of entrepreneurship, could also be described as a process by which an individual or group of individuals within the existing organization, creates a new organization or encourage the processes of renewal or innovation within the organization enterprises (Sharma & Chrisman, 1999). The corporate concept of entrepreneurship extends understanding of the concept of entrepreneurship and entrepreneur.

The modern understanding of the term entrepreneurship no longer recognizes entrepreneurship as an individual who is the owner of the enterprise, but as anenterprise in which teamwork is present.

The traditional concept of entrepreneurship defines entrepreneur as a person who is the owner and manager of the enterprise and who has enough resources to begin production. General, entrepreneurship involves

the creation of a new economic entity, established as the new product or service, which is different from the products or services offered elsewhere in the market. Unlike the traditional concept of entrepreneurship in which the entrepreneur is the sole owner of total activities beginning from the capital, idea, risk taking and else., corporate entrepreneurship is characterized by the enterprise or corporation is an owner, winner of all activities. The traditional notion an entrepreneur, defines entrepreneur as a creative person who takes advantage of opportunities to organize the production process, innovate and take risks. The modern notion of the entrepreneur defines entrepreneur as a person who has an innovative approach to addressing the challenges, possesses the capability for decision making and compliance work in a group. Corporate entrepreneurs always act creatively and innovatively. The main goal of these entrepreneurs is to find a solution to the emerging problems. Because of that corporate entrepreneurs always take highly risky, creative and innovative activities. Considering the extremely difficult job of solving emerging problems, corporate entrepreneurship is extremely innovative. Innovation, risk-taking and proactiveness are "original size" of corporate entrepreneurship (Covin and Slevin, 1986).

The traditional concept of entrepreneurship focuses on the individual, the entrepreneur who takes the overall risk in the operation apart from the modern entrepreneurial concept by which the risk of errors takes over the enterprise. Taking risk is tied to a willingness to transfer more resources to projects where there may be high costs of the mistakes (Miler and Friesen, 1978). Employees working in enterprises with corporate organizational culture are limited in terms of financial benefit which could make unlike traditional entrepreneurs who have no restrictions in terms of opportunities for reward. The decision-making process, the individual versus the traditional approach with the corporate team approach, defines the responsibility of operations.

Entrepreneurial culture accelerates innovative creativity, risk taking and organizational learning and the basic characteristics of the conservative culture are controlled, numerous rules and avoiding the risk of errors (Atuahene-Gima and Ko. A., 2001).

Corporate entrepreneur shares the results of operations with team members and traditional entrepreneur faces uncertainty in operation regardless of employee involvement in decision-making and performance results. Employees who participate in the process of corporate entrepreneurship within the enterprise must possess specific individual skills to successfully integrate existing and new knowledge and identify, evaluate and embrace entrepreneurial

opportunities (Heyton & Kelly, 2006). Corporate entrepreneurship is a process of continuous learning, the ability to deal with problems and learning problems. The ability to identify the causes of problems allows corporate entrepreneurship not only be able to cope with the problems but also to learn from them. Corporate entrepreneurial behavior is a response to the constant changing environment. Corporate entrepreneur constantly learns to adapt decision-making to dynamic processes.

3. APPLICATION OF CORPORATE ENTREPRENEURSHIP

The modern concept of entrepreneurship today represents a continuous creative process, whose main objective is the implementation of innovation and new ways of working in enterprises in order to improve the effectiveness of operations and solving emerging problems, meeting the needs of consumers and society. The concept of work in modern enterprises is based on the entrepreneurial concept of work that is based on accepting the risk of errors, creativity, innovation and activity and responsibility of every employee in the enterprise to achieve organizational goals. In the modern conditions of work, entrepreneurship is not innate, inherited characteristic of certain undertakings. All enterprises regardless of and activity performed must encourage entrepreneurship as a universal process. Size enterprises are not limiting in terms of the application of innovation and entrepreneurial initiative (Drucker, 2005). Large enterprises must encourage corporate entrepreneurship to overcome problems faced in everyday work. Enterprises who want to succeed in complex and dynamic environment apply entrepreneurial organizational structure and entrepreneurial management. Entrepreneurial management concept is the basis of entrepreneurial oriented enterprise. Corporate entrepreneurship as a modern concept is represented in those enterprises that support innovation and creativity of employees. The existence of an organizational culture that encourages innovation provides conditions for the application of the concept of corporate entrepreneurship. Entrepreneurial behavior and encouraging of entrepreneurship organizational culture allows businesses to improve operations. Corporate entrepreneurship enables enterprises to be future-oriented, integration model of entrepreneurship in the processes and procedures in the enterprise, flexibility and creating a business climate that prioritizes innovation. Enterprise management has

a major role in understanding the necessity of applying the concept of corporate entrepreneurship. Competitive aggressiveness and entrepreneurial orientation of the enterprise are activities of top management (Antoncic and Hisrich, 2004). Implementation of innovative activities in the operation can realize only self-motivated employees who have a positive attitude towards constant changes in operation. Successful enterprises unite the previously acquired knowledge of employees with work plan and future strategy for work that contributes to creating a new ability of the enterprise that can enhance performance, increase profitability and facilitate the development of the enterprise. From the management of enterprises are expected to encourage employees to constantly reveal original values for consumers and new ways to reduce operating costs and continually improve the knowledge, skills and abilities they possess. The identity of enterprise that applies corporate entrepreneurship varies according to five key elements: autonomy, innovation, proactive, competitive aggression and risk-taking (Dess, Lumpkin and Eisner, 2007).

Enterprises possess a certain degree of freedom in operation, regardless of whether the enterprise is working on identifying or implementing new activities or attempts. Autonomy as a feature of corporate entrepreneurship means independence and free access to the implementation of business activities.

Enterprises that practice the concept of corporate entrepreneurship encourage employees to innovative and creative behaviors. Innovation is the specific instrument of entrepreneurship which uses the resources of the new capacity to create wealth (Reynolds, 2001).

Proactive enterprises constantly follow new trends and try the fast and most efficient way to find a solution to the emerging problems. As a basic feature of corporate, entrepreneurial orientation, pro-activeness is aimed at constantly finding new opportunities in conditions where rapid development of technology leads to the emergence of new competitors.

Competitive aggressiveness is encouraged by the development of a positive attitude towards the need of constant change and basis for change is the innovative activity and orientation towards competitive market positioning. Well-off enterprises basically have the courage to be first to market in such conditions (Suares &Lanzolla, 2005). The constant support of new ideas, innovative activity, creation of innovation and trying to be dominant in the market, express competitive aggressiveness of the enterprise as an element characteristic of corporate entrepreneurship.

Risk taking is the basis for determining the identity of the entrepreneur. As a component of corporate entrepreneurship, taking risks is identified with the desire to succeed and the ability to foresee opportunities. The entrepreneur is the bearer of responsibility, but always tries to minimize the risk and predict in advance.

4. METHODOLOGY AND RESEARCH RESULTS

In order to perceive and determine whether the enterprises in the Republic of Macedonia represent the concept of corporate entrepreneurship a practical research was conducted. Through the method of questionnaire consisting of five questions which actually represent the model of corporate entrepreneurship is expressed by the presence of elements such as autonomy, innovation, proactive, competitive aggression and risk-taking were 70 enterprises in private ownership in the Republic of Macedonia were examined. From the surveyed enterprises, 55 showed interest in it and fill in the questionnaire and the other did not show interest for responding the questions. The results from the research are presented graphically.

According to the descriptive statistics and the total number of observations received on each issue, we concluded that on the first question - Is the management independent in making decisions about business operations?, 43 surveyed managers said that they are fully independent and autonomous decision-makers in the enterprise operations and 12 managers responded that decisions are made in consultation with the owners.

Figure 1:Is the management independent in making decisions about businesss operations?
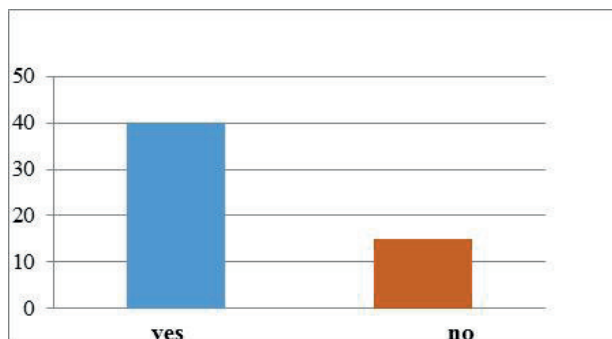
The second question - Do you encourage innovation among employees by providing financial resources for innovation?, the majority of respondents 41 said they do not provide financial resources for innovation and 14 managers responded that the enterprise has a special fund for financial innovation.

Figure 2:Do you encourage innovation among employees by providing financial resources for innovation?
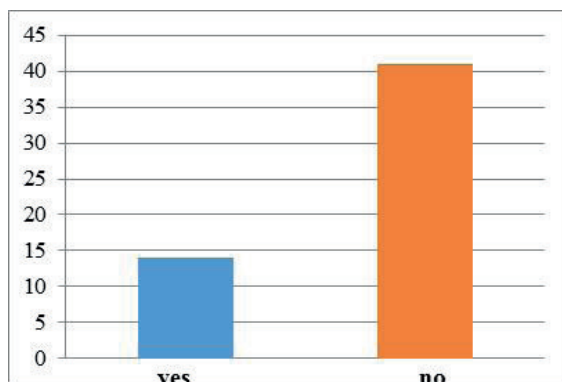
The third question - Do you follow new trends and behavior among competing enterprises? 28 managers of surveyed enterprises said they constantly monitor developments in competing enterprises and 27 managers responded that they work in the usual way of working.

Figure 3:Do you follow new trends and behavior among competing enterprises?
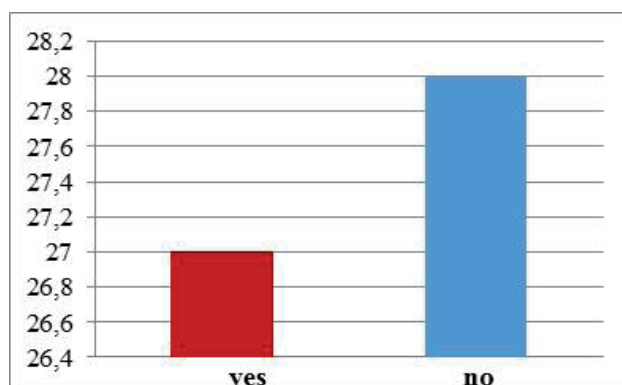
The question –Do you dominate the market and the environment in which you work? 45 managers responded that they do not dominate the market and in the environment in which they work and 10 managers believe that their enterprise has a dominant market position.

Figure 4: Do you dominate the market and the environment in which you work?
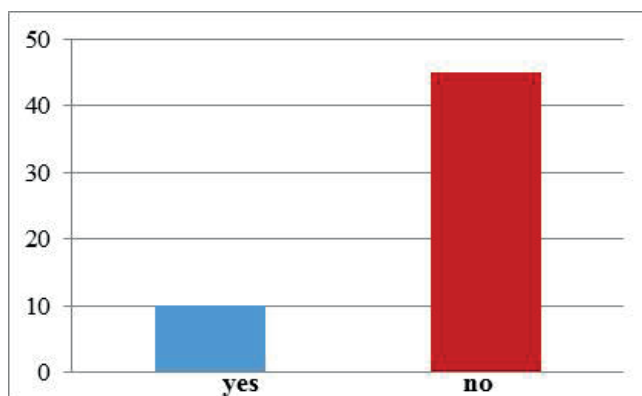
The fifth question – Do you take risks in your business operations? 15 managers responded that they undertake risk operations and 40 managers responded that they do not take risks in business.

Figure 5: Do you take risks in your business operations?
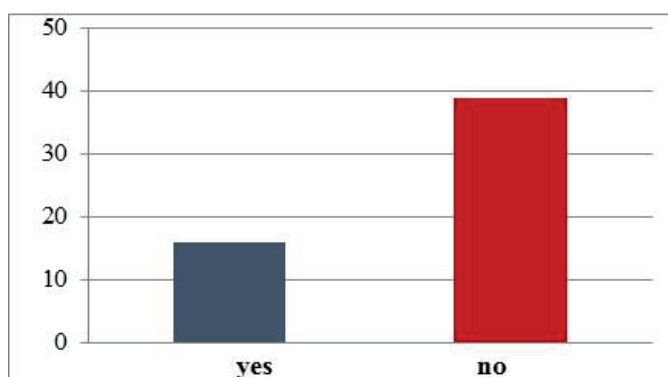
According to the results of the survey on the representation of the model of corporate entrepreneurship enterprises in the country, it is noted that the management of most enterprises surveyed, is an independent operation

but in terms of taking risk is limited or does not take risks in business. Almost half of the surveyed companies are trying to follow the developments in the environment in particular activities and business processes in competitive enterprises. Management of a small number of companies is trying to motivate the employees to introduce innovative ways of working by providing funding for innovation.

Conclusion

The dynamic trend of changes in the environment causes changes in the way the organization of work and the concept of entrepreneurship. Modern managers are predicting on time the future developments and therefore introduce changes in the entrepreneurial orientation of the enterprise. The traditional model of entrepreneurship replaces the modern model of corporate entrepreneurship that contributes to achieving positive organizational outcomes. Therefore, this concept is the subject of study and research on various aspects and dimensions.

Enterprises that implement the corporate model of entrepreneurship have certain organizational features that allow the model of corporate entrepreneurship to be applied. Corporate entrepreneurial orientation integrates the entrepreneurial process with other processes in enterprises and corporate entrepreneurs, continuously promote processes of change and innovation within the enterprise. The application of the concept of corporate entrepreneurship creates conditions for competitive performance of the enterprise and achieving competitive position based on the ability and knowledge of management or the modern entrepreneur but also advancing the knowledge of all employees. In this regard, important precondition or model for implementing a corporate entrepreneurship and corporate entrepreneurship orientation in enterprises are: encouraging constructive, open communication between staff at all levels, encouraging individual creativity, encouraging teamwork, constructive approach to solving problems, decentralized organizational structure that provides an open approach to the application of models of innovation, the existence of organizational resources for research and development and organizational mechanisms for adjusting the enterprises and employees to the changes.

The results of the conducted survey on the representation of the model of corporate entrepreneurship within enterprises in the Republic of Macedonia

according to the presence of features such as autonomy, innovation, proactive, competitive aggression and risk-taking show that changes are needed in terms of organizational conditions to support innovative approach to business, competitive market positioning and underwriters.

In order to overcome and improve the situation determined by the introduction of new modern models of corporate entrepreneurship that will increase the competitiveness of enterprises, as possible conclusions and recommendations one can set: constant enhancement of the motivation of employees to work in flexible working environment, by constantly encouraging creativity and innovation of the employees, constantly monitoring new trends and ways of working, and trying to establish a special financial fund for innovation in enterprises and integration of the concept of corporate entrepreneurship in the model of work organization.

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ADVERTISING TO CHILDREN AND PARENTAL BUYING BEHAVIOR IN THE MUNICIPALITY OF GEVGELIJA

Abstract

Advertising to children in Macedonia, even though significantly present, is not sufficiently researched, thus emphasized topic among the scholars. Therefore, it was considered important and useful to provide better understanding of how advertising affects children in Macedonia. More specifically in the Municipality of Gevgelija, the research is about how children's actions affect parental buying behavior. In order to collect data, quantitative research was used. The data was collected using structured questionnaire which was delivered to selected sample of respondents from the Municipality of Gevgelija who have children under the age of 12.

The results of the research reveal that children are affected by children advertising, especially television advertising. They watch TV on daily basis, on their own or with their parents. Furthermore, this has impact on parental

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buying behavior, i.e. children are frequently included in the family daily buying decisions.

Keywords: advertising to children, parents buying behavior, attitudes, media impact, media usage.

JEL Classification: M370, M380, M390, M310

Introduction

Effective, ethical and in general children related advertising is a very popular topic nowadays worldwide. However, this is not the case in Macedonia, where this topic is not sufficiently emphasized. On the other hand, the number of TV commercials targeting children and/or using children as main actors is considerable. Therefore, it was considered attractive to conduct a research in order to evaluate the impact advertising has on children in Macedonia, more specifically Municipality of Gevgelija, consequently on their parents buying behavior and to get understanding of parents attitudes towards advertisements targeting children. For this purpose observation of parents' interactions with their children when they plan to buy something together and of childrens' habits of using electronic media was necessary to be done. Additionally, comparison of the relevant regulation in Macedonia versus the EU was considered useful.

From television in bedrooms to computers in classrooms, advertising is present in every environment that children inhabit. For this reason, Wilcox at al. (2004) in the Report of the APA Task Force on Advertising and Children stated that advertising industry has intensified its focus on children, creating advertisements that are engaging and appealing to children. This research contributes to the existing work due to the fact that it was conducted on a local, not a national level. It is important because it provides answers on many questions connected to children advertising, such as level of awareness of the advantages and disadvantages of children advertising and its impact on children.

1. CHILDREN HABITS OF USING DIFFERENT MEDIA

Advertising to children, as a topic, has attracted attention of many commentators and researchers, and is becoming a vital subject among marketers. According to Nairn et al. (2008: 627 - 640) children constitute a major market for commercial organizations. Their roles in family purchases cannot be trivialized (McNeal, 1999).

In the research in 2012, undertaken by the Ofcom,[5] television is the most popular medium for children of all age in Europe. The case study from Rideout (2010) found that 36% of all children aged 0-6 years have a television in their bedrooms and they spend 15% more time on TV than those without television in their rooms. According to Foehr (2006), 68% of 8-18 year olds and 33% of children from birth to 6 year old had a TV in their rooms. The changes in advertising industry regarding children also change children's own habits of using media. The reality that children and adolescents read, view and consume this new popular media requires parents and teachers at school to be aware of it, and to be more fluent with the diverse media that their children use (Marshall, 2011).

According to the Report of Federal Trade Commission from 2004 children from 2-11 ages saw about 25,600 television advertisements which include paid ads, promotion for other programming and public service announcements. In 2004 children spent about 10,700 minutes of TV advertising while adults saw 52.500 ads which are 22,300 minutes of advertising. The report found that children are not so exposed to food ads as they were in the past. Media exposure predicts media multitasking (Holt et. al, 2007). There is a data from Ofcom report in 2012 that presents that media multi-tasking is very popular among 12-15 aged children. For example children text or browse the internet while watching TV. Kaiser Family Foundation (2010) summarized the share of total amount of time spent with individual medium which is also shared with any other medium. The time watching TV is very likely to be share with other activities as eating, cleaning etc. Only 17% of television time is share with other media, 33% of listening music is share with other media, while only 41% of playing games is share with other media. This research shows that television is the most likely to be multitasked because it paired with listening music, playing video games, reading books etc. From the other side, computer is "media multitasking station" because

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[5] Ofcom is an independent regulator and competition authority for the UK communications industries.

doing homework on the computer young people are sending e-mails at the same time and doing any other computer activities as a secondary activities (Rideout et.al, 2010).

According to Holt (2007), children aged from 2-11 saw 5,500 food ads in 2004, which is 22 percent of all ads viewed: restaurants and fast food advertisings (5.3% of total ad exposure), followed by cereal (3.9% or 85% of this category), desserts and sweets (3.5%), snacks (1.9%), sweetened drinks (1.7%), dairy (1.4%) and prepared entrees (0.9%) as a part of the 22 percentage food ads exposure. From the other side, only 43% of the children saw nonfood products ads such as: promotions for television programming (28%), screen/audio entertainment (7.8%), and games, toys and hobbies (7.5%).

The changes in advertising industry regard children make changes in children habits of using media. Polaroid snapshot or Facebook photo page are the new tools in everyday children's life. Disney, Barbie, Facebook, Tweeter, My Space etc. are the new popular media that changes the children habits of using media.

2. THE IMPACT OF ADVERTISEMENTS ON CHILDREN

Children are surrounded by many electronic media such as TV, print media and internet as well. Because of their susceptibleness children get easily influenced by advertisements. When children see a product on an advertisement, they do not understand that the company's aim is to sell and that that is a business. Sigman (2007: 12–17) researched the effects of violent media such as movies and video games targeting children. The results of the study showed that children's early exposure to television would be associated with subsequent problems. Moreover, Hancox (2004: 257–262), in their research, found that children who watched more than two hours of television a day between the age of 5-15 developed health risks many years later such as 15% raised blood cholesterol, 17% of obesity, 17% of smoking and 15% reduced cardiovascular fitness. The research from the British Market Research Bureaux (BMRB) (2004:20) found that television has a bad influence on children because according to the research 45% of boys and 28% of girls aged 0-6 imitate aggressive behavior, as kicking and hitting, which they had viewed on TV. Marketing and advertising has big influence on girls and women because they may contribute to body dissatisfaction, eating disorders, low self esteem and depressive effect (Zurbriggen et al., 2007).

3. CHILDREN'S IMPACT ON PARENTAL BUYING BEHAVIOR

Nowadays, there are big changes in the social and demographic structure. These current changes are increasing children's influence on their parent's buying decision and their involvement in family decision making. According to Ward (1974: 1-14), consumer socialization is a process by which children and young people acquire skills, knowledge and attitude related to their role as consumers in the marketplace. Those attitudes are connected to TV commercials or knowledge of brands and products, and skills as how to compare different brands and products. For example 30% of parents buy the toothpaste their kids choose and 45% buy a brand such as butter, jam and health drinks, which their children select (Sultan, 2011: 18-41).

According to the Institute of Medicine, marketing campaigns' branded characters, which are media characters that appeal to children and youth, are associated with the company and promote its brand name (Wilcox at al.,,2004). For example, Sponge Bob, Ronald McDonald, the animated characters Tony & Tiger etc. are the characters that are used to increase the interest of the product which increases the sell (Wilcox at al.,2004). As children grow older, they develop a better knowledge and understanding of different information sources and organize these sources in a more flexible way and also develop preferences for specific information sources. The consumer socialization helps researchers realize that the age stages of a child, that are mentioned at the beginning of this part, are an important factor of the child's influence on family decision making process (Suwandinata, 2010).

1. RESEARCH METHODOLOGY

Sample of this research covered citizens from Municipality of Gevgelija. A questionnaire with total of 27 questions was given to 50 parents of children 12 years old or younger.

The respondents' age sample ranged between 15-45 years, out of which 88% were women and the other 12% were men. Female gender dominates because in comparison to men they were more open to the research and interested in the topic. The quantitative research consisted of data

collected through structured questionnaire made on the basis of the analytical study Sultan (2011: 18-41). The questionnaire was expanded according to the Literature Review and the main researched objectives.

The questionnaire consisted of 27 questions, divided in 4 groups. The questionnaire begins with demographic questions (age, gender, nationality, education status, employment status, income). In this part the questions offered multiple choice answers. Table 1 presents the age groups of the respondents. The parents were grouped into 5 different age groups: 15 – 17 years old (2%), 18 – 24 years old (6%), 25 – 34 years old (48%), 35 – 44 years old (42%) and 45 and more only 2%. According to the results 50% of the sample is between 25 and 34 years of age.

Table 1. The age groups of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15-17	1	2,0	2,0	2,0
	18-24	3	6,0	6,0	8,0
	25-34	24	48,0	48,0	56,0
	35-44	21	42,0	42,0	98,0
	45 and more	1	2,0	2,0	100,0
	Total	50	100,0	100,0	

Source: Developed by the author

The employment status of the sample respondents is the following: 68% of the total respondents work for wage, 16% are self –employed, 14% are unemployed but looking for work, and only 2% of the total are unemployed and not looking for work. A well-known fact about the Municipality of Gevgelija is that the unemployment rate is low, thus the results don't differ from this. Referring to the nationality of the sample respondents, the results show that 94% of the respondents are Macedonian, 4% are Turkish and only 2% are Serbian. According to official statistics, most of the population in the Municipality of Gevgelija is Macedonian. It is not a multiethnic environment, therefore many of the respondents are Macedonians.The major part of the sample, or 64% of the total respondents have Bachelor degree, 24% have finished only high school, 6% of the respondents have Master degree, 4% have PhD degree, and only one respondent or 2% of the total has finished primary school.

The results show that only 30% of the sample household income is above 30,000 MKD. 28% of the sample has household income between 20,000 to 30,000 MKD, 20% of the sample has household income between 15,000 - 20,000 MKD, while only 14% has total household income of 15,000 MKD or less. Accordingly, the sample is middle class dominating. If the respondent had two children, the age of the younger child was taken as relevant. The results showed that 44% of the children are between 4-8 years old, 42% are between 1-3 years old and only 7% are between 7 to 12 years old. Thus, the majority of the sample has children from 1 – 8 years old.

As to the four groups of questions, the first group of questions contains questions about children's habits of using electronic media. The questions in this group provide multiple choice and Yes/No/Neutral answers. The second group of questions focused onthe impact advertising to children has. Here most of the questions have a 5 – point Liker scale (strongly agree, agree, neutral, disagree and strongly disagree) and only 1 multiple choice question. The third group of questions presented children's impact on parental buying behavior. All questions in this part have a 5 – point Liker scale (strongly agree, agree, neutral, disagree and strongly disagree). The last group focused on parental perception towards children advertising. Here the questions also have a 5 – point Liker scale (strongly agree, agree, neutral, disagree and strongly disagree) and only one is Yes/No/Neutral question. The statistical analyses were carried out with the Statistical Software and Service Solution (SPSS).

For parents having more than one child, as stated above, the youngest child attitudes, experience and behavior were relevant. The decision to focus on the youngest child in a group of more children of different ages was based on the assumption that the advertising nowadays is mostly targeted toward younger children, and the possibility of their impact on parental buying behavior being accordingly stronger. The questionnaire was distributed in printed form, in face to face interviews and online, as a word document.

5. DISCUSSION

Many of the studies, mentioned in the literature review, discuss television as a media which is more appealing to children. In table 2 presented are the percentages of children's television, radio and internet exposure. According to the results about media exposure to children in the Municipality

of Gevgelija, television is still the most interesting media to use, participating with almost 70% . Following television children use internet more than radio. Internet usage is about 32% and radio usage is only 1,6%. Also 22% of the total respondents answered that their children use more than one media: internet and television.

Table 2. Media Frequencies

		Responses		Percent of Cases
		N	Percent	
Media[a]	Television	41	67,2%	82,0%
	Radio	1	1,6%	2,0%
	Internet	19	31,1%	38,0%
Total		61	100,0%	122,0%

Source: Developed by author

This phenomenon is connected with the time of using electronic media, as 42% of the respondents' children watch TV one hour and 44% of the respondents' children watch two hours and more, i.e. children under age of 12 are TV viewers and spend in average more than two hours watching TV (Table 3).

Table 3. How much time your child spend watching TV?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15min	2	4,0	4,0	4,0
	30min	5	10,0	10,0	14,0
	1 hour	21	42,0	42,0	56,0
	2 hours	11	22,0	22,0	78,0
	more than 2 hours	11	22,0	22,0	100,0
	Total	50	100,0	100,0	

Source: Developed by author

Graph 1 - How much time your child spend watching TV?
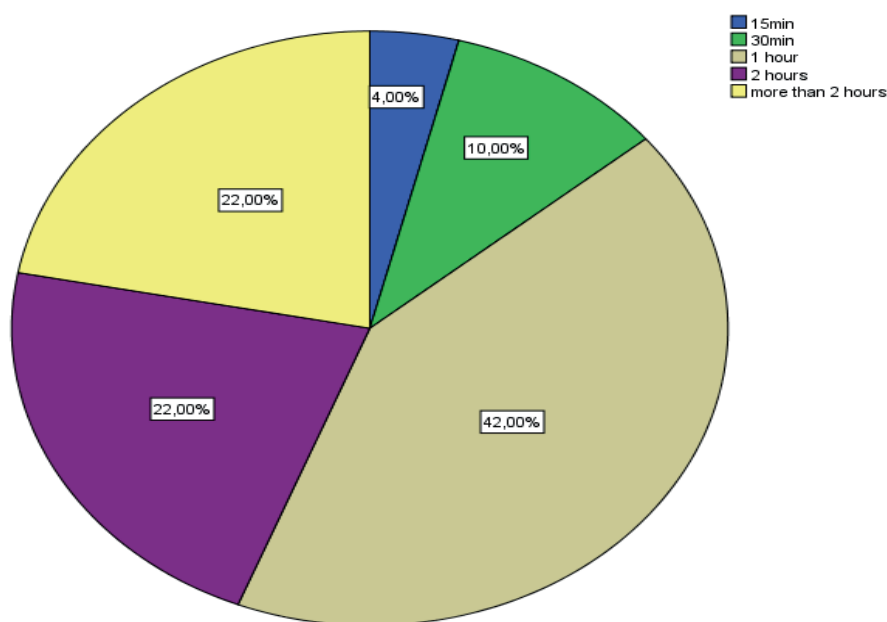
Source: Developed by author

Having TV sets in their rooms increases the childrens' media exposure. According to the results, presented in the table 4, 60% of the children under the age of 12 don't have TV sets in their bedrooms, while the remaining 40% have TV sets in their bedrooms. The stated reasons for not having TV sets in the children's' rooms were mainly protection against television media exposure during bedtime. According to the numbers, it can be concluded that children exposure to television in the Municipality of Gevgelija is high. According to this study, children advertising industry changes the electronic media use habits of children especially television, social media, and the interactive media such as video games, toys etc.

Table 4. Does your child have TV in his room?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	20	40,0	40,0	40,0
	No	30	60,0	60,0	100,0
	Total	50	100,0	100,0	

Source: Developed by author

Graph 2 - Does your child have TV in his room?
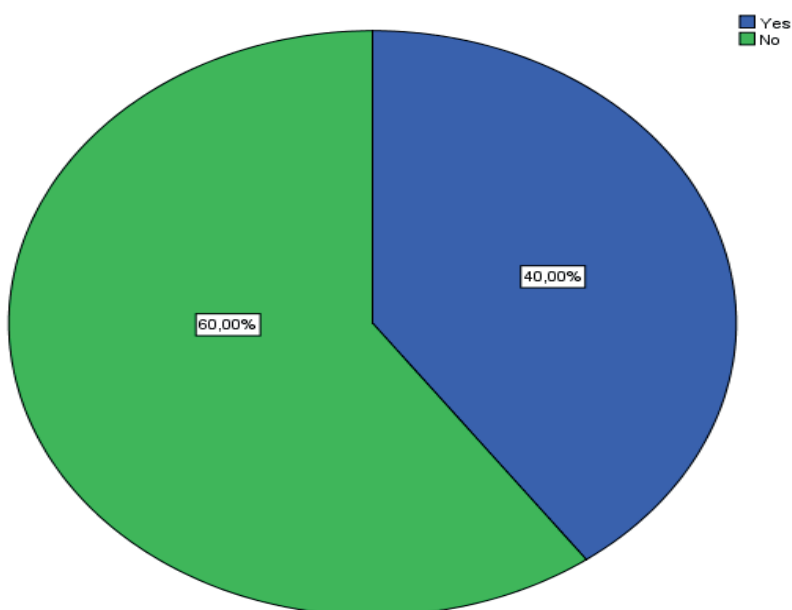
Source: Developed by author

The presented results in the table 5, in this research, about children's rational understanding of advertising messages or objectives show that most of the respondent's (44%) opinion on this is neutral. Only 30% agree that the child is reasonable enough to understand the message of the advertisement.

Table 5. Your child is rational enough to understand the message of the advertisement.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Totally agree	1	2,0	2,0	2,0
	Agree	15	30,0	30,0	32,0
	Neutral	22	44,0	44,0	76,0
	Disagree	10	20,0	20,0	96,0
	Totally disagree	2	4,0	4,0	100,0
	Total	50	100,0	100,0	

Source: Developed by author

Graph 3. Your child is rational enough to understand the message of the advertisement
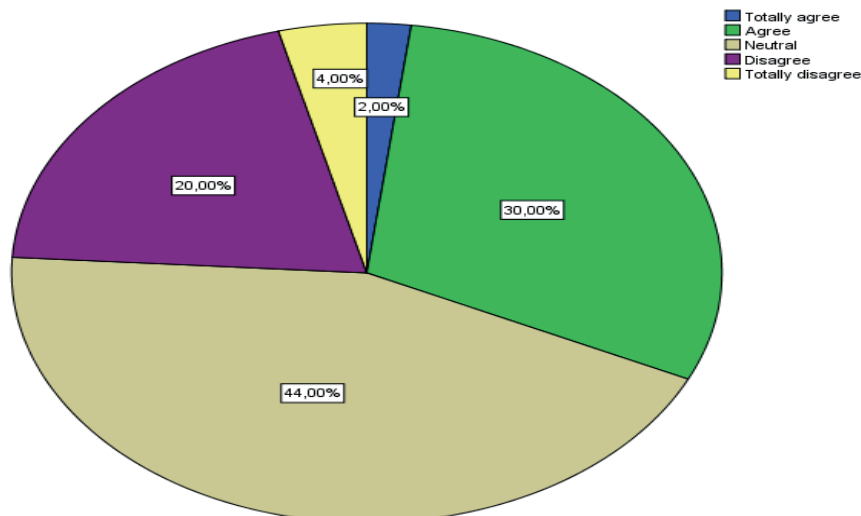
Source: Developed by author

The questionnaire included also a question relating to five food and two non food advertisements and commercials. All advertised products, presented

in the table 6, are made and sold in Macedonia, and they are as follows: Bimilk (milk), Becutan (cosmetics), Ladna voda (water), Bekolino (food), Dijamant Majonez (food), Najlepshe Zelje (food, chocolate) and the quiz "Se ili Nesto". According to the research, respondents' children prefer the commercials for Ladna voda (water), where the main actors are children. In the relevant commercial children answer questions such as "Which color is the water?" and "Where does the water come from?". The content in this commercial is very attractive for children and for parents as well. The advertisements/commercials for Bimilk, Bekutan and Najlepshe Zelje are the second most attractive advertisements/ commercials with 36,4%. The least attractive advertisements/commercials according to the answers are Bekolino and Dijamant Majonez advertisements/commercials with 22.7% and the commercial for the quiz Se ili Nesto, with 20.5%. According to the analysis 12% of the total respondents didn't choose any of the mentioned advertisements/commercials, in which cases they specified that their children preferred the following ads: AD Osiguritelna Polisa, Coca Cola, Pikovit, Podravka, Sutash and Smoki Smoki. According to the research children prefer food advertising in comparison to non-food advertising.

Table 6. Ads Frequencies

	Responses		Percent of Cases
	N	Percent	
Bimilk	16	16,5%	36,4%
Bekutan	16	16,5%	36,4%
Ladna voda	20	20,6%	45,5%
Bekolino	10	10,3%	22,7%
Dijamant majonez	10	10,3%	22,7%
Najlepshe zelje cokolado	16	16,5%	36,4%
Kviz Se ili nesto	9	9,3%	20,5%
Total	97	100,0%	220,5%

Source: Developed by Author

Graph 4 - Ads Frequencies
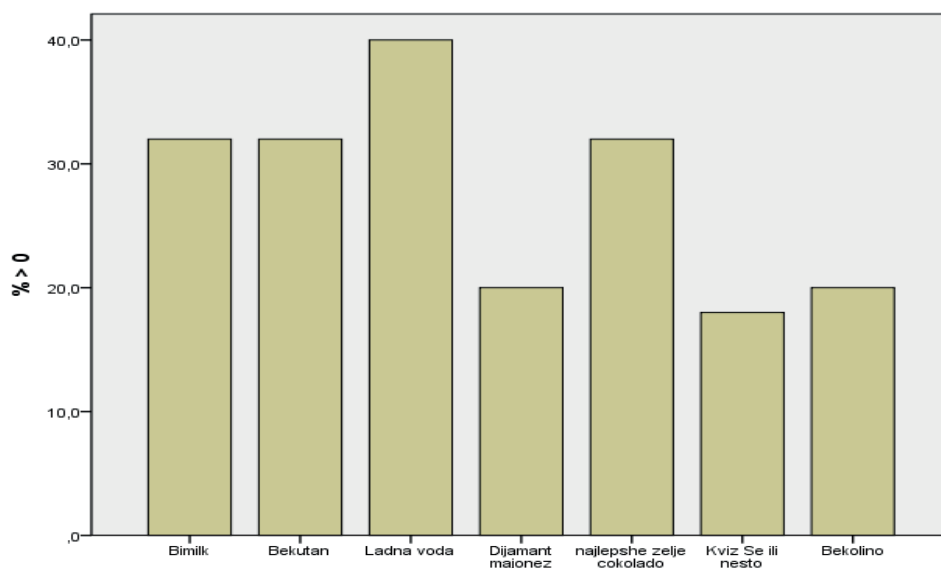
Source: Developed by Author

According to the Literature review, the worldwide literature agrees that advertising really affects children's health and encourages aggressive behavior. The presented results in the table 7, show that 16% of the respondents agree, 40% are neutral and other 40% disagree that advertising has negative influence on children and encourages aggressive behavior.

Table 7. Advertising have negative influence on your child and affects aggressive behavior.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	8	16,0	16,0	16,0
	Neutral	20	40,0	40,0	56,0
	Disagree	20	40,0	40,0	96,0
	Totally disagree	2	4,0	4,0	100,0
	Total	50	100,0	100,0	

Source: Developed by author

Graph 5- Advertising have negative influence on your child and affects aggressive behavior
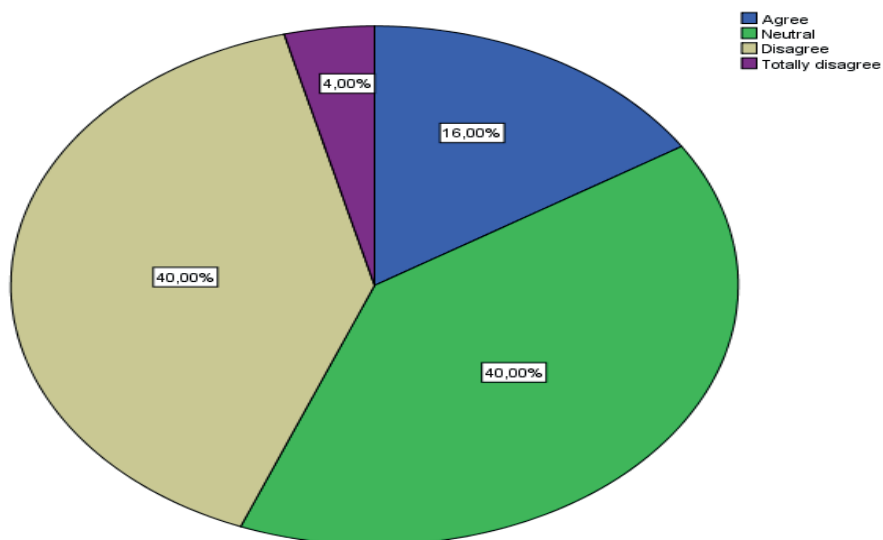
Table 8. Do you think that fast food ads should be banned?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	26	52,0	52,0	52,0
	No	10	20,0	20,0	72,0
	Neutral	14	28,0	28,0	100,0
	Total	50	100,0	100,0	

Source: Developed by Author

On the other hand, 52% of the respondents think that fast food ads should be banned, while 20% don't think the same, which is presented in table 8.

Graph 6 - Do you think that fast food ads should be banned?
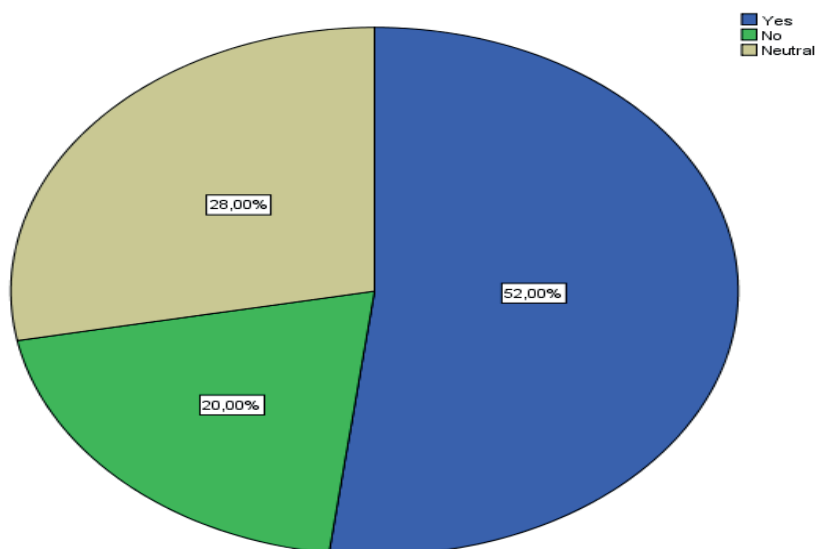
Source: Developed by author

This may lead to a conclusion that most of the respondents are not well informed or are not aware about many of the disadvantages of advertising such as: aggressive behavior as a result of early TV viewing, sexualization of girls, inappropriate sexual behavior, low selfesteem as a result of body dissatisfaction, difficulties falling asleep etc. (Zurbriggen et.al, 2007). On the other hand, according to the results advertisement content is important for the respondents, i.e. they don't want their children to watch fast food ads because of possible negative health effects, such as obesity.

This research shows that 34% of the respondents agree that advertising may convince their child to want a certain expendable product and 54% of the respondents agree that advertisements and placement of products affect their children while shopping, while only 20% disagree with all of the above.

The results to the question "Do you always ask your children which product they want to use", show that most of the respondents or 36% of the total disagree that they always ask their children which product they want to use. Still, considerable 26% of the respondents agree with this. On the other hand, the answers to the next question referring to "Involvement of children

in family purchasing decisions" show that 36% of the respondents agree, while 34% disagree that their child should be involved in their purchasing decisions. This result is in accordance with other studies, such as Salim (2010: 15–26), according to which "children are becoming very important consumer group and a new segment". Consumer socialization, according to Ward (1974: 1-14), is a very important process in which children and young people acquire skills, knowledge and attitude related to their role as consumers.

The next question "You detest watching unethical advertisements while sitting with your children" shows that 62% of the total respondents dislike to watch unethical advertisements while sitting with their children and 32% of the respondents totally agree with the statement. The results show the parents want to protect children from unethical advertisements. On the other hand, respondents also believe that using children in advertisements is also a good idea. The results show that 46% agree with this, while only 6% disagree. Children role play is not attractive only for parents, but for children as well. The most viewed advertisement by the children, mentioned above, are Ladna Voda which use children role playing. "Children advertising in Macedonia is ethical" is the final question with ethical background. Most of the respondents or 56% of the total are neutral, while only 26% agree with this statement.

As to the regulation of children advertising in Macedonia, 38% of the respondents are neutral and don't have an opinion on children advertising regulations in Macedonia. Only 32% of the total agree that children's advertising in Macedonia is well regulated, while remaining 24% disagree or totally disagree.

Conclusion

To summarize, according to findings of the research, in the Municipality of Gevgelija, advertising has a significant influence on children and parental buying behavior. Television is typically used medium among children under the age of 12. Internet is on second place. More than 20% of the children that watch TV are using internet as well. The research shows that children in the Municipality of Gevgelija spend two hours and more watching television. Although only 20% of the children have television in their rooms, television advertising influence on children is substantial, especially during the evenings.

The results show that parents cannot recognize whether their children are capable to rationally understand the advertising message or not, because most of them are neutral in relation to this question. Furthermore, the results show that parents are also not aware or are not well informed about the advantages and disadvantages of children advertising. Most of them didn't give specific answers about the usefulness of advertising to children and believe that children advertising doesn't affect children health and doesn't encourage aggressive behavior. Contrary, they agree that fast food ads should be banned in order to protect children from child obesity.

Lastly, advertising to children affects parental buying behavior in the Municipality of Gevgelija, since children of age 12 and under, first and foremost are easily attracted to advertised products, consequently the same are very influential in persuading their parent to buy advertised products, considering that they are usually involved in the family daily buying decisions.

Researching all of this, researcher found not only answers, but questions as well. For better understanding children advertising and its impact on children and parental buying behavior as an extensive topic needs future research. There is a need for more case studies at the local to allow further assessment of local dimension of this subject. Exploring the future research strategies can facilitate the attainment of this goal. This research is a "springboard" for the future research topic as the impact of food advertising on child obesity, the consumer socialization, the quality of electronic media and the children habits of using the modern media. Researching these topics could give interesting results that would be unexpected for parents and business sector on a local level.

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MITE MITEVSKI[1]

SYSTEM OF PUBLIC INTERNAL FINANCIAL CONTROL IN THE REPUBLIC OF MACEDONIA- ACHIEVEMENTS AND IMPROVEMENTS

Abstract

Public financial management is a very responsible and sensitive area which is preconditioned by a number of interrelated factors, one of them being the proper implementation of the concept of Public Internal Financial Control (PIFC).

The concept of PIFC was developed by the European Commission during the second half of the 1990s and is nowadays used to guide and support EU accession candidate countries, as it is the Republic of Macedonia, in their attempt to develop modern public internal control systems.

This concept is an internal control framework for the public sector, which the candidate countries must accept to meet the requirement of Chapter 32, of the accession negotiations. Therefore, these requirements are also an obligation to our country.

Given the significance of this issue for the Macedonian public sector, I have decided to devote a major part of my research papers to the system of Public Internal Financial Control in the Republic of Macedonia. The paper gives an overview of topics, core elements and the developments in this area. The purpose of it is to assess the current state of this concept in practice and to give conclusions and recommendations for further improvements.

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Key words: public sector, financial management and control, internal audit, harmonization, managerial accountability.

JEL classification: M4, M40, M41, M42, M48

Introduction

Corruption in the public sector is a worldwide phenomenon, to which weak administrations and countries in transition are particularly vulnerable. High levels of corruption limit investment and growth and lead to ineffective government. Furthermore, corruption creates inefficiencies and inequities.

Consequently, reducing the potential for corruption involves eliminating bureaucratic monopolies and arbitrariness, promoting transparency and increasing the standards of accountability and practices applied. One of the mechanisms which could help in this direction, is the concept of Public Internal Financial Control (PIFC), since, among other aspects, it also covers the area of awareness-raising and prevention through suggesting implementation of a number of conceptual, legal and organizational actions.

The concept of PIFC was developed with the intension to provide assistance to the candidate countries to improve their management of public finances, national and EU funds, by understanding and applying a well-developed and effective system of internal controls.

Furthermore, the concept of PIFC urges the managerial structures to make their decisions based on the "value for money", thereby obtaining a maximum benefit and achieving the most of the efficiency and effectiveness with the assets available. This, on the other hand requires a high quality of financial accounting information systems.

Moreover, this concept emphasis the responsibility and the accountability of the managerial structures. They are those who assume the responsibility for the implementation of appropriate, effective and efficient system of internal financial control. Such systems require proper and clear division of competences and responsibilities within an organization at all levels of management and their adequate performance.

Public sector must ensure that public resources are managed in a manner which provides more for less and this can only be achieved if efficient

control systems are put in place, which ultimately will result in compliance with both national and EU regulations.

PIFC is an essential and a constituent part of the public administration reform. The best effects of which are expected to be achieved when they are carried out simultaneously.

1. THE CONCEPT OF PUBLIC INTERNAL FINANCIAL CONTROL

Public administrations operate using the money of their taxpayers. The manner of spending public funds is in the spotlight of all citizens in the country. How the public sector and the civil servants behave has a crucial impact on the formation of public opinion and trust of citizens. For this reason taxpayers are entitled to receive assurance that public administrations take due care in managing funds.

Established and implemented PIFC system can provide assurance that government funds are being spent wisely. Therefore, PIFC is primarily based on well-established international standards which aimed at making public finance management more transparent and accountable.

PIFC is a structured model which helps the management establishes a highest level of control environment for their spending units. It aims to give reasonable assurance that transactions comply with the principles of sound financial management, transparency, efficiency, effectiveness and economy, as well as with relevant legislation and budget descriptions.

The system of PIFC is structured by three main elements that are explicitly represented in the following formula[2]:

$$\textbf{PIFC = IC + CHU, where IC= FMC + IA}, \text{follow}$$
$$\textbf{PIFC = FMC + IA + CHU}$$

PIFC - Public Internal Financial Control;

IC - Internal Control;

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[2] Robert de Koning, Public Internal Financial Control, Brussels, 2007

FMC - Financial Management and Control;

IA - Internal Audit;

CHU - Central Harmonization Unit.

1.1. Managerial accountability - financial management and control

The financial management and control, often presented as a system of managerial accountability, is a set of plans, policies, procedures and practices that are established by management to allow employees to exercise the main goals of the institution:

- economic, efficient and effective execution of tasks and services, in accordance with the mission of the institution;
- protecting the resources from loss, misuse, bad management, errors, frauds and irregularities;
- conformity to laws, bylaws and internal acts;
- preparation of reliable and timely reports based on which future decisions will be made.

In fact the management shall establish a system of internal controls intended to provide a reasonable assurance that the goals are achieved. Internal controls refer to both management and the employees at all levels in the institution, as well as to other stakeholders. Hence, they will be more effective if all parties comply with the prescribed rules and regulations.

In order to make the internal controls effective, they need to be:

- adequate - which means having the right controls in the right place, according to the needs;
- to function in a consistent manner;
- cost - effective.

Financial management and control need to be implemented on the basis of international standards on internal control, based on the COSO Framework[3].

Internal controls based on this framework consists of the five interrelated components:

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[3] INTOSAI, Guidelines for Internal Control Standards for the Public Sector

- control environment (integrity/ethics, human resources, management philosophy, organizational structure and accountability);

- risk assessment (objectives such as definitions, communication, consistency, performance indicators and priorities/resources, implementation and risk (assessment) identification);

- information (accuracy, timeliness) and communication (internal and external);

- control activities (division of duties, supervision, procedures, manuals, help desk, recording of exceptions and a checklist on financial procedures (audit trail)) and

- monitoring (role of audit, frequency of self-assessment exercises, update of methodology and reporting deficiencies).

Performing a self-assessment on the system of internal controls is a useful tool to improve their establishment and implementation. This activity is performed on the institutional level, by completing a self-assessment questionnaire, which requires from the management and the employees who have financial management responsibilities to assess their own actions and procedures and benchmark the effectiveness thereof in relation to the objectives of the adopted internal control standards. The questionnaire should reflect all financially related processes and cover different components mentioned in the COSO model.

Central Harmonization Unit (CHU) plays the main role in this self-assessment activity. The CHU is responsible for developing and harmonizing financial management and control systems. This unit should also develop a template and a methodology for self-assessment which can then be further tailored by Heads on financial departments in public institutions for application in their own organizations.

Once the template is developed, completed and the results have been analyzed, the management should organize a workshop to discuss the results, draw conclusions and draft a report as the basis for an action plan on areas identified for improvement.

1.2. Internal Audit

An important part of the system of internal controls is the establishment of functionally independent internal audit.

Internal auditing is an independent consulting activity, designed to give an objective assurance, add value and improve the organizational operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, controlling and governing processes[4].

The internal auditor with its advisory role can greatly contribute to the creation of internal controls, but should never be a substitute for them. The functional independence of the internal auditor means that he works independently and objectively, in accordance with international standards and the Charter on Internal Audit, and for his works he/she is directly accountable to the top management. They, on the other hand, should have a thorough understanding of the function of internal audit and especially of its independent character. This can only be fully achieved if the CHU for Internal Audit and the internal auditor work together on well-focused awareness campaigns aimed at managers and financial officers.

The internal auditor can help the management in assessing the effectiveness of internal controls. Auditor's continuous monitoring of the work in the institution allows for timely and adequate perception of the effectiveness of internal controls. In case of absence or non-compliance with the already established internal controls he is due to provide this information to the management and give appropriate advice about it.

One of the fundamental prerequisites of PIFC system is the introduction of sound financial management and control. However, intending to establish this system, more than often, administrations run into the issue of well defining or distinguishing between the internal audit and financial inspection. Namely, the main concern is whether these two overlap, should we rename or abolish the existing forms of financial inspection (budget control etc.) and replace them with internal audit, or establish an internal audit with the intention to function as a financial inspection.

Nevertheless, it ought to be clarified that the internal audit and the financial inspection in its design, establishment and functioning are two separate activities, having different roles and objectives. Yet, in the frames of the PIFC system, these two activities should be understood as complementary activities.

Ultimately, the role of internal audit is to support managers of the public sector in achieving the institutional goals and objectives.

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[4] International Professional Practices Framework (IPPF), The Institute of Internal Auditors Research Foundation. Florida, USA, January 2011

1.3. Central Harmonization Unit

Another key to the successful establishment and development of effective internal control system is the Unit for harmonization of the financial management and control and internal audit. This unit should be a driving force in the development and improvement of the PIFC system.

It involves:

- developing and improving the legislation;
- giving proposals for the development and harmonization of the internal control and internal audit (manuals, templates etc.);
- monitoring the implementation of legislation and standards;
- organizing trainings;
- co-operation with the Supreme Audit Institution and other international organizations.

Yet, the central role in establishing a comprehensive system of public internal financial control in a country is given to the the Ministry of Finance. The later provides for the basic legal framework stipulating the elements of public internal financial control, as guidelines to be followed by all stakeholders in the public sector.

1.4. Role of the Supreme Audit Institution in applying the PIFC concept

The Supreme Audit Institution has a major role in creating the structure of internal controls in any country. This institution should encourage and support management in establishing their proper system of internal controls.

The Supreme Audit Institution should maintain good cooperation with internal audit to ensure exchange of experience, avoiding overlap of work and ensuring complementarity of the overall audit function. Well-developed internal audit can greatly reduce the workload of the Supreme Audit Institution.

The connection between internal and external audit is clearly expressed in Chapter 32 – Financial Control of the Acquis Communautaire, in which the three main elements are: public internal financial control, external audit and protection of the financial interests of the European Union.

2. ACHIEVEMENTS IN THE IMPLEMENTATION OF PIFC CONCEPT IN THE REPUBLIC OF MACEDONIA

When we talk about the concept of PIFC, it is very important to consider making an assessment of the progress of implementation of this process. In practice the activity can be carried out in different ways, by taking different approaches or scopes. It can be focused on some components, or some phases (from the beginning of the implementation up to date; the last years of implementation, etc.).

The progress assessment of the implementation of PIFC in our country takes a comprehensive approach, covering the overall establishment of this system from the beginning of its implementation to the present date, and it is for the purposes of this article summarized as such.

The assessment also covers the following stages of implementation:

- conceptualization of the system;
- development of organizational framework;
- development of the legislative framework and
- establishing human resources development policies

A good conceptualization of any systems, including the system of PIFC, is a crucial precondition for its successful implementation. This stage must be lead by Central Harmonization Unit, positioned in the Ministry of Finance. At this stage it is necessary to perform a gap analysis of the current internal control system in the country. It is usually a good practice to perform these activities in cooperation with experts from EU member state countries, as well as with relevant domestic stakeholders. The outcome of these activities should be the PIFC Policy Paper and a realistic Action Plan, suggesting a chronological plan of actions and activities to be taken in the future, along with a time framework for their implementation.

Looking back at the historical development of the PIFC system in the Republic of Macedonia, we observe a systematic progress governed by three different policy papers covering the period 2006 - 2008, 2010 - 2012 and the last one for 2015 - 2017.

The Action Plans arising from the first two Policy Papers were implemented with the help of EU funded Twinning Projects. They were focused on creating the necessary conditions and assumptions for establishment and

development of an effective system of internal financial control in the public sector in our country.

The Third Policy Paper aims at further strengthening and developing the existing system of internal financial control in the public sector, as a useful tool for the management in regards to sound financial management and control of national and European funds.

The preparation of all three strategies was the responsibility of the Central Harmonization Unit of the Ministry of Finance.

This Unit was established at the very beginning of the implementation of PIFC system in our country. Throughout this period, the Unit has undergone several organizational changes. At present the CHU consists of a Financial Management and Control Harmonization Unit and an Internal Audit Harmonization Unit, as units which operate in line with the EU best practices and standards.

Once completed the phase of conceptualization CHU should begin the procedure for the development of organizational framework. In this respect it must be underlined that the CHU is a driving force in the process of establishing a functionally independent internal audit unit within line ministries, agencies and other institutions at all levels of government. Furthermore this Unit should provide a continuous support to the management, which will facilitate the processes of financial management and internal control and make them compatible and harmonized with relevant EU standards and practices.

Since the adoption of the Law on Public Internal Financial Control[5] our country observes a notable progress in the establishment of Financial Management and Control systems and Internal Audit, both on central and local level.

At the end of 2015, the outcome of the legal obligation to establish a Financial Management and Control systems and Internal Audit in 91 central level institutions and 81 municipalities (80 municipalities and the City of Skopje) is as follows in tables:

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[5] Published in the "Official Gazette of the Republic of Macedonia", no.90/2009 with amendments

Table 1. Financial Management and Control on central and local level

	2009	2010	2011	2012	2013	2014	2015	Level
1. Number of institutions which established Financial Affairs Unit	14	32	39	46	66	66	71	central
	1	14	27	39	40	46	58	local
2. Number of appointed Heads of Financial Affairs Unis	0	20	30	36	42	45	53	central
	0	10	22	33	35	38	44	local
3. Number of institutions which adopted a Decision for Internal Distribution of the Total Approved Budget	0	0	0	49	65	73	53	central
	0	0	0	55	63	65	53	local
4. Number of institutions which adopted Decisions for General Authorization	0	0	0	29	51	47	31	central
	0	0	0	19	32	32	33	local
5. Number of institutions which appointed a Person for Reporting Iregularities	31	44	56	59	61	64	76	central
	34	49	55	58	58	59	66	local
6. Number of institutions which adopted Annual Plans for Develepoment of Financial Management and Control	0	0	0	0	0	0	44	central
	0	0	0	0	0	0	38	local
7. Number of institutions which adopted a Risk Management Strategy	0	0	0	0	0	0	42	central
	0	0	0	0	0	0	22	local
8. Number of institutions which have made a Risk Register	0	0	0	0	0	0	36	central
	0	0	0	0	0	0	16	local

9. Number of institutions which adopted a Rulebook (internal act/ procedure/ rules) on the implementation of FMC	0	0	0	0	0	0	31	central
	0	0	0	0	0	0	20	local

Source: Based on official data from the Ministry of Finance of the Republic of Macedonia, www.finance.gov.mk

Table 2. Internal audit development and results on central and local level

	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**Level**
1. Established internal audit units	24	35	46	58	64	71	73	76	78	84	central
	0	17	32	40	49	59	64	65	71	71	local
2. Internal auditors	52	68	81	90	111	120	133	137	142	145	central
	15	27	33	35	44	52	60	64	67	68	local
3. Heads of Internal Audit Units	0	0	27	34	34	35	44	47	47	51	central
	0	0	15	18	19	18	22	21	18	20	local

Source: Based on official data from the Ministry of Finance of the Republic of Macedonia, www.finance.gov.mk

According the activities envisaged by the Action Plan, the next phase of the development of PIFC system is the improvement of the legal framework, with the objective to more comprehensive in regulating all three components of the PIFC system.

This phase includes two activities - one is preparing the Law on PIFC and the other, drafting respective bylaws.

This phase in our country was completed with the support of two EU Twinning projects, the aim of which was to establish and strengthen the PIFC system in the country.

As a result, in 2009, the Law on public internal financial control was adopted, followed later by the adoption of bylaws:

- In the area of financial management and control[6]:
- Rulebook on the Manner of Implementation of General Financial

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[6] Published in the "Official Gazette of the Republic of Macedonia", no. 147/10 and 34/11

Processes;

- Rulebook on the Manner of Giving Authorization,
- Rulebook on the Manner of Performing Activities under the Competence of the Financial Affairs Units;
- Internal Control Standards in the public sector and
- Rulebook on the Form and the Contents of Reports and Statement on Quality and the Status of Internal Controls under the Annual Financial Report.
- In the area of financial management and control[7]:
- Rulebook on the Manner of Performing Internal Audit and Audit Reporting;
- Rulebook on Internal Audit Charter;
- Rulebook on the Code of Ethics of Internal Auditors;
- Rulebook on the Curricula and Exam on Certified Internal Auditor in the Public Sector and
- International Standards on Professional Practice of Internal Auditing.

With the intention to improve the implementation and the practical applicability of the current legislation some changes have been introduced, especially in the part which defines the conditions and the manner of conducting the examination for certified internal auditors in the public sector.

The implementation of all previously mentioned stages of the PIFC system could not have been successfully achieved if appropriate human resource policies had not been put in place.

It is fundamental that all conditions necessary for the establishment of the PIFC system are met, herein including those related to the promotion and strengthening of human capacities through education and training.

Professional development and training in the area of the newly introduced PIFC concept and internal control is needed not only for the employees, but also for the middle and the top management in order to raise their awareness on the benefits of practicing this concept. This is supposed to create a "tone at the top" attitude and highlight the commitment of the management to having a functionally independent and effective internal audit unit.

Consequently, the CHU of the Ministry of Finance has organized a number of trainings, workshops and seminars, in the area of financial management and control, for a vast majority of managers and employees in

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[7] Published in the "Official Gazette of the Republic of Macedonia", no. 136/10

governmental institutions and local government units, as to help them better understand the importance and the idea behind this concept, as well as to facilitate its implementation within their own institutions.

Trainings have also been provided for internal auditors. Moreover, efforts have been made to organize examinations for international certification of internal auditors. Seventy seven internal auditors took this opportunity and successfully completed the training and passed the CIPFA exam for internationally certified internal auditors in public sector.

Conclusions and recommendations for improvement of PIFC system in the Republic of Macedonia

Summarizing the results of the analysis of the PIFC system in our country, we can conclude that all necessary conditions and requirements have been met – relevant legislation and supporting regulations have been developed and adopted in compliance with the highest standards and recommendations.

Nevertheless, there are still some areas of improvement for which following actions might be taken into consideration:

- raising awareness among public sector entities of proper and full implementation of all legal requirements (in accordance with the Law on PIFC), especially in the area of financial management and control;

- continuous coordination with the top management in the public sector so as to improve their understanding of the benefits from the implementation of financial management and control and increase their commitment and support for the role of internal audit;

- establish a CHU in accordance with the legal obligations, which make this unit responsible for performing quality supervision on financial management and control and internal audit units in public entities;

- revision of the existing laws aiming to overcome the difficulties of establishing the institutional framework in the area of financial management and control and internal audit in smaller institutions, at central and local level;

- organize continuous trainings for the new employees, managers and other employees, to continuously upgrade their knowledge and skills in the field.

Successful implementation of this system has multiple indirect effects on improving the quality of life of the people. Therefore, competent authorities need to continuously monitor its implementation, timely detect problems and take the necessary measures to improve its implementation.

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SILVANA MOJSOVSKA[1]

PROGRAMMING AND IMPLEMENTATION OF IPA IN THE REPUBLIC OF MACEDONIA

Abstract

This paper aims to provide an overview of the programming and implementation of EU Instrument for Pre-accession Assistance (IPA) in the Republic of Macedonia, as well as discussion about challenges and opportunities with regards to introduction of sector-based approach under IPA II. The main hypothesis of the paper is that IPA II sector approach is not likely to provoke significant differences into the programming of the assistance, compared to IPA I, while implementation would be more challenging. This particularly refers to introduction of multi annual budget framework in the country and capacity building of the IPA Operational Structure for sound strategic planning and project implementation. The paper has been elaborated mostly by use of methods of analysis and synthesis, based on extensive processing of data and consultation of relevant literature.

The paper provides an overview of the process of programming and implementation of IPA I (2007-2013) and IPA II (2014-2020). In this context, the IPA I has been analysed in the context of programming per Components, as well as introduction of sector classification in its latest programming period 2011-2013. Furthermore, there has been an overview of the available data for the implementation of the IPA I. The discussion has been related to the problems of implementation, largely attributable to the complexity and longevity of the procedures, insufficient absorption capacity of the IPA Operational Structure,

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as well as necessity for improvement of the performance measurement of the IPA projects. Furthermore, the paper focus on programming process for IPA II, primarily on the criteria for introduction of sector approach and comparison to the programming process of IPA I. The major finding of the paper is that programming under sector approach under IPA II would not differ essentially compared to the programming of IPA I for the period 2011-2013. The genuine challenges could be located with regards to implementation of IPA II, which are rather similar to the problems identified for IPA I, with addition to the shift towards multi-annual budgeting. That is likely to be the most challenging for the Republic of Macedonia in the implementation of IPA II.

Key words: Instrument for pre-accession assistance (IPA), IPA II sector approach.

JEL classification: F35

Introduction

The EU Instrument for pre-accession assistance (IPA) has been designed in purpose to assist EU candidate and potential candidate countries in their process of accession to the Union. IPA has been introduced in 2007, with financial perspective(s) of six years. The first financial perspective - IPA I (2007-2013) had been projected to 11.5 billion euros.[2] It consists of five components:

1. Transition Assistance and Institution Building
2. Cross-border cooperation
3. Regional Development
4. Human Resources Development
5. Rural Development

The eligible countries for use of IPA I have been divided into two categories:

- Candidate countries for accession to the EU (Turkey, Albania, Republic of Macedonia, Montenegro and Serbia), eligible to use all

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[2] http://ec.europa.eu/enlargement/instruments/overview/index_en.htm

five IPA I components;

- Potential candidate countries from the Western Balkans (Bosnia and Herzegovina and Kosovo), eligible to use the first two IPA I components.

The second financial perspective of IPA is allocated to the period 2014-2020. The total budget of IPA II has been projected on 11.7 billion euros.[3] Sector approach has been introduced for implementation of IPA II, which replaces the structure per Components.

Both IPA financial perspectives represent large amount of finances channeled towards the Western Balkans, including the Republic of Macedonia. However, there was a criticism about insufficient use of the assistance, which led to introduction of the sector approach under IPA II. This paper aims to provide overview of the allocation and use of IPA in the Republic of Macedonia, as well as identification of the challenges and opportunities for the country with regards to introduction of IPA II sector approach. The main hypothesis of the paper is that sector approach under IPA II is not likely to provoke significant differences into the programming of the assistance, compared to IPA I, while implementation of IPA II mostly faces challenges similar to the problems identified for IPA I. Additional challenge would be introduction of the multi-annual budget planning, which is expected to mark implementation of IPA II. The methodology of research primarily includes methods of analysis and synthesis, based on processing of available data and consultation of relevant literature.

1. PROGRAMMING AND IMPLEMENTATION OF IPA I IN THE REPUBLIC OF MACEDONIA

The National IPA assistance provided for the Republic of Macedonia in the period 2007- 2013, through the five components of the IPA, amounts to EUR 619.2 million, as presented in the Table 1.[4] This is the latest available data with regards to the allocation for IPA I, which represents an increase compared to the initial planned allocations of EUR 615.2 million for the Republic of Macedonia. The difference is due to the changes in operational (annual) planning, as the allocations are preliminary and could be changed

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[3] Ibidem
[4] Multi-Annual Indicative Financial Framework, 2012-2013, European Commission, Brussels, p. 6

with regards to the needs of the beneficiary country and/or priorities of EU policy in a specific field.

Table 1: IPA 2007-2013 allocations to the Republic of Macedonia (EUR millions)

IPA Components	2007	2008	2009	2010	2011	2012	2013	2007-2013
Component I	41,7	41,1	39,3	36,9	28,8	27,2	27,9	242,9
Component II	4,2	4,1	4,4	4,5	5,1	5,0	5,2	32,5
Component III	7,4	12,3	20,8	29,4	39,3	41,0	51,8	202,0
Component IV	3,2	6,0	7,1	8,4	8,8	10,4	11,2	55,1
Component V	2,1	6,7	10,2	12,5	16,0	18,2	21,0	86,7
Total	58,6	70,2	81,8	91,7	98,0	101,8	117,1	619,2

Source: Instrument for pre-accession assistance (IPA) revised multi-annual indicative financial framework for 2012-2013, European Commission, Brussels, 12.10.2011, p. 6.

As evident from the Table 1, the assistance increases over the years (on annual basis), provided that absorption capacity of the country will increase. The allocation of IPA I Funds in the Republic of Macedonia has been set out in two documents: Multi-Annual Indicative Financial Framework (MIFF) and Multi-annual Indicative Planning Document (MIPD). MIFF is a framework document stipulating financial allocation of the IPA Funds to beneficiary countries for the period of three years. The current MIFF refers to the period 2012-2013 (revised version of the MIFF 2011-2013).[5] In addition, MIPD is a planning document referring to individual country, aiming to set out the EU's priorities for assistance in a three year period. The current (fourth) MIPD for the Republic of Macedonia refers to the programming period 2011-2013.[6] In addition, there have been Operational Programmes for Components III, IV and V, outlining the specific allocations for the respective components.

The above mentioned documents refer to the period up to 2013, which is the latest year of IPA I programming, while implementation spreads to longer time horizon. In this context, contracting of the approved projects under IPA 2011 in the Republic of Macedonia has been completed in November 2015, implying that the implementation of the IPA I would last much longer compared to programming period (at least to 2020).

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[5] http://www.sep.gov.mk/data/file/Pred%20Pristapna%20podrska/IPA/MIFF/MIFF%202012-2013.pdf
[6] http://www.sep.gov.mk/data/file/Pred%20Pristapna%20podrska/IPA/MIPD%20nacionalen/MIPD%202011-2013.pdf

Although IPA I has been structured into Components I-V, MIPD 2011-2013 has introduced programming of the assistance through targeted sectors. As stated in the document, a sector approach should facilitate cooperation among donors and beneficiaries, where possible under the lead of the national authorities, eliminating duplication of efforts and leading to greater efficiency and effectiveness.[7] This new approach of MIPD served as a preparation for the sector based approach under IPA II, which would be further elaborated below.

The following priorities for IPA support covered by MIPD 2011-2013 in the Republic of Macedonia have been identified:[8]

- Support the economic and social development of the country;
- Improve good governance and reduce corruption and
- Ensure non-discrimination and respect of human rights.

To achieve the priorities selected for support in the programming period 2011-2013, the Commission decided to focus its assistance primarily on the following sectors:[9]

- Public administration
- Justice, home affairs and fundamental rights
- Private sector development
- Agriculture and rural development
- Transport
- Environment and climate change
- Social development

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[7] Multi-annual Indicative Planning Document , p.3
[8] Ibidem
[9] Ibidem

The planned allocation of IPA support per sector and per year is presented in Table 2.

Sectors	Table 2. Indicative Financial Allocation per Sector (EUR millions)			
	Period 2007 – 2010		Period 2011 – 2013	
Public Administration Reform	28.00	9.9%	21.33	7 %
Justice, Home Affairs and Fundamental Rights	44.00	15.6%	24.38	8 %
Private sector development	45.50	16.2%	45.71	15%
Agriculture and rural development	46.40	16.5%	67.04	22 %
Transport	52.50	18.6%	60.95	20%
Environment and climate change	28.30	10.0%	54.85	18%
Social development	37.30	13.2%	30.47	10%
TOTAL	282.00	100%	304.76	100%

* Total without allocations for IPA Component II, Cross-border cooperation

Source: Multi-annual Indicative Planning Document for the Republic of Macedonia 2011-2013, p.12

These sectors represent different classification of IPA I, as they have already been included in the Components (explicitly or indirectly). For instance, Transport and Environment have been part of Component III (Regional Development), Agriculture and Rural Development refer to Component V (Rural Development), Public Administration Reform and Justice, Home Affairs and Fundamental Rights have been largely incorporated into the Component I (Transition Assistance and Institutional Building), etc. As noted in the Table 2, significant amount of finances for the period 2010-2013 has been allocated to the Transport, Environment and Climate Change (38%), which corresponds to the structure of allocations in the Table 1, where Component III (Regional Development) absorbs over 1/3 of the finances. Some of the sectors (Table 2) spread out into two or three components of IPA I, which does not particularly affects IPA I implementation per components, but is expected to provide better insight into the effectiveness of the IPA use. However, data of IPA implementation per sectors is still not available. As mentioned above, the contracting period for the projects approved under IPA 2011 has been closed by the end of 2015, implying that implementation data per sectors could be available no earlier than in 2016. In this context, the data about implementation of the IPA I would be analysed per Components.

The available data for use of IPA I, released by the Secretariat for European Affairs within the Government of the Republic of Macedonia and EU Delegation in the Republic of Macedonia, have shown that by the end of 2013, a total of 37.3 percent of the EU Instrument for Pre-accession Assistance (IPA) funds allocated to Macedonia for 2007-2013 have been used.[10] It should be stressed out that this indicator refer to contracted projects up until 2009, as well as use of some of the assistance for the period 2010-2013. This implies that further increase of the IPA I spending should be expected in the upcoming years.

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[10] http://www.sep.gov.mk/en/content/?id=361#.VITOSlJ0w5s

Table 3: Status of implementation of IPA financial assistance at 31st December 2013 (EUR millions and percentage)					
IPA Compo-nents	Allocated 2007-2013	Contracted	Paid	Percentage contracted	Percentage paid
Component I	248,2	134,9	94,9	54,3	38,3
Component II	19,9*	10,6	7,4	53,4	37,0
Component III	199,3	/	50,6	/	25,3
Component IV	54,4	12,9	18,8	23,7	33,2
Component V	85,7	/	2,4	/	4,0

* Data for Component II (CBC) refer only to the part allocated to the Republic of Macedonia. In addition, the Republic of Macedonia participates into the CBC Programmes with Bulgaria and Greece and has share in these allocations, too, which explains the data differences in the Table 1 and 4.

Source: 2013 Annual Report on Financial Assistance for Enlargement (IPA, PHARE, CARDS, Turkey Pre-Accession Instrument, Transition Facility), European Commision, COM (2014) 610, p. 15-19

With regards to the data, it should be noted out that there is lack of systematized data related to absorption of IPA Assistance in the Republic of Macedonia. The desk research undertaken for the purpose of elaboration of this study has shown that European Commission's Annual Report on Financial Assistance for Enlargement (IPA, PHARE, CARDS, Turkey Pre-Accession Instrument, Transition Facility)[11] provides data about the status of implementation of IPA Financial Assistance, although the data per Components has not always been provided in a fully comparable manner. This particularly refers to Components II, Component III and Component V. The latest available data as of December 2013 has been presented in the Table 3.

In addition to the EC Report mentioned above, there has been a study "Analysis of the use of IPA Funds" by European Policy Institute – Skopje, issued in December 2013, which represents an effort for compiling available data by different sources on IPA Funds in Macedonia. The data as of this study are presented in Table 4.

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[11] http://ec.europa.eu/enlargement/pdf/financial_assistance/ipa/2014/2013-ipa-report.pdf

IPA Components	Allocated 2007-2013	Contracted	Paid	Percentage contracted	Percentage paid
Table 4: Status of implementation of IPA financial assistance at November 2013 (EUR millions and percentage)					
Component I	244,1	91,9	63,4	38	26
Component II	30,3	17,2	7,5	57	25
Component III	200,4	55,8	2,8	28	1
Component IV	54,4	12,9	10,5	24	19
Component V	85,6	5,7	5,6	7	7

Source: Analysis of the use of IPA Funds, European Policy Institute – Skopje, 2014, p.6

As evident from the Tables 3 and 4, there are significant discrepancies of data with regards to certain elements, in particular amounts of paid funds. This might refer to use of different methodologies by both sources, but also confirms the lack of systematized, available and reliable data for absorption of the IPA assistance, which is an issue that should be addressed by EC and national authorities.

Regardless of the differences in the presented data above, it is clear that absorption capacity in all Components should be increased. Particularly low level of absorption has been noted in the Component V. This situation led to reallocation of EUR 18 million from Component V to Component I from IPA 2009 (conducted in the course of 2013), in purpose of preserving the complete IPA I allocation for the country (otherwise, this amount of money would have been withdrawn by the European Commission). The main reason for low absorption could not be related to securing of co-financing by the Government, as co-financing for all Components has been ensured in a timely manner, but mostly to the problems in the implementation.

According to the assessment in the Country Programme Interim Evaluation of IPA 2007 Component I in the Republic of Macedonia: "Objectives in strategic programming documents are not clearly prioritized and supported by measurable impact indicators. Furthermore, the project selection process is not always supported by an objective mechanism to determine the most relevant and cost-effective project proposals".[12]

Furthermore, the Programming for IPA I (2007-2013) has been marked with the longevity of the process, taking minimum of two years. Programming requires a portfolio of mature project concepts based on qualitative and detailed

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[12] Multi-annual Indicative Planning Document for the Republic of Macedonia 2011-2013, p.7

input, which is a problem in certain sectors. The implementation of IPA also faces many challenges, as the period from concept to completion of projects lasts for approximately 5 years, with significant amount of time devoted to the process of approval of the project tendering documentation by national and EU structures. In this respect, shortcomings in the quality of the tendering documentation could be regarded as main reason for delays in the procedures. The issues related to quality of the project tendering documentation imply need for further capacity building of the public administration employees involved into the process of preparation of this documentation. In addition, measurement of the effectiveness of the use of IPA assistance derive from shortcomings in setting measurable impact indicators. The beneficiaries tend to measure project achievements in terms of outputs, not in terms of the results. The output indicators exist, although they differ in quality, while result indicators are rarely well-set, which implies difficulties in assessment of the IPA effectiveness. This also requires for increase of the capacity building of the IPA related institutions.

Most of the issues mentioned above are expected to be alleviated with introduction of the sector approach of IPA II. According to the European Commission: "This sector approach promotes structural reform that will help transform a given sector and bring it up to EU standards. It allows a move towards a more targeted assistance, ensuring efficiency, sustainability and focus on results. IPA II also allows for a more systematic use of sector budget support. Finally, it gives more weight to performance measurement: indicators agreed with the beneficiaries will help assess to what extent the expected results have been achieved."[13] These expectations are rather strong, although the sector-based approach has already been applied in **MIPD 2011-2013** in the Republic of Macedonia and most of the problems related to implementation of IPA I are likely to occur with regards to IPA II.

2. PROGRAMMING AND IMPLEMENTATION OF IPA II IN THE REPUBLIC OF MACEDONIA

The IPA II assistance allocated to the Republic of Macedonia for the period 2014-2020 amounts to EUR 664.2 million, as presented in the Table 5. The main strategic document setting priorities for IPA II (2014-2020) for the Republic of Macedonia is the Indicative Strategy Paper,[14] adopted in August

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[13] http://ec.europa.eu/enlargement/instruments/overview/index_en.htm
[14] http://ec.europa.eu/enlargement/pdf/key_documents/2014/20140919-csp-former-yugoslav-republic-of-macedonia.pdf

2014. The Strategy Paper sets out the priorities for EU financial assistance for the period 2014-2020 to support the Republic of Macedonia on its path to EU accession. According to Indicative Strategy Paper, the financial assistance under IPA II shall mainly be located into eight sectors:[15]

1) Democracy and governance
2) Rule of Law and fundamental rights
3) Environment
4) Transport
5) Competitiveness and innovation
6) Education, employment and social policies
7) Agriculture and rural development
8) Regional cooperation and territorial cooperation

Table 5 : IPA 2014-2020 allocations to the Republic of Macedonia (EUR millions)						
IPA Components	2014	2015	2016	2017	2018-2020	Total 2014-2020
a. **Reforms in preparation for Union membership**	39.7	17.9	35.6	26.9	85.8	205.9
Democracy and governance	66.1				56.8	122.9
Rule of law and fundamental rights	54.0				29.0	83.0
b. **Socio-economic and Regional development**	41.0	38.7	38.0	46.0	135.1	298.8
Environment and Climate action				61.3	51.6	112.9
Transport				56.4	56.5	112.9
Competitiveness and innovation				46.0	27.0	73.0
c. **Employment, social policies, education, promotion of gender equality, and human resources development**	0.0	14.0	13.0	0.0	26.2	53.2
Education, employment and social policies				27.0	26.2	53.2
d. **Agriculture and rural development**	5.0	18.3	5.0	22.0	56.0	106.3
Agriculture and rural development				50.3	56.0	106.3
TOTAL	85.7	88.9	91.6	94.9	303.1	664.2

Source: http://ec.europa.eu/enlargement/instruments/funding-by-country/former-yugoslav-republic-of-macedonia/index_en.htm

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[15] Ibid.

As evident in the Table 5, seven out of eight sectors has been explicitly included into the IPA allocations 2014-2020, while Multi-Country Strategy Paper will address priorities for regional cooperation or territorial cooperation.[16]

The sectors included in the Table 5 largely coincide with the strategic focus of the Programme of the Government of the Republic of Macedonia (2014-2018), which sets out five strategic objectives:[17]

1) To increase economic growth and employment;

2) To integrate the country into the EU and NATO;

3) To fight corruption and crime and implement laws efficiently;

4) To maintain good inter–ethnic relations based on the principles of mutual tolerance and respect and implementation of the Ohrid Framework Agreement and

5) To invest in education, science and information technology for a knowledge–based society.

As evident, the selected sectors for IPA II greatly correspond to the priorities of the Government, reflecting the primary aim of IPA assistance to support accession of the country to the Union. It could be argued that such correspondence is really valuable, but it has to be stressed out that the country lacks National Development Plan or other development document which would outline development course of the country in a mid or long time frame.

As noted above, the sector approach for IPA II has been designed in purpose of prevailing weaknesses of the implementation of IPA I through components, given the low absorption rate, as presented in Tables 3 and 4. As indicated above, the Republic of Macedonia has partially started with sector oriented planning under MIDP 2011-2013. Most of the sectors noted in Table 5 have already been included in MIPD 2011-2013, indicating that Programming under IPA II would not be much different compared to the Programming under IPA I.

However, full implementation of the sector approach should be applied. In this context, the implementation of sector based approach for IPA II is related to several criteria that country must fulfil. The following three criteria are considered to be essential and must be in place before adopting a sector approach in a particular country: [18]

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[16] http://ec.europa.eu/enlargement/instruments/overview/index_en.htm

[17] Programme of the Government of the Republic of Macedonia 2014-2018(www.vlada.mk)

[18] Indicative Strategy Paper for the Republic of Macedonia 2014-2020, p.6

1. The existence of a national sector policy and strategy and a sector budget or a commitment by government to either elaborate or refine these;

2. An institution/ Ministry responsible for the sector/subsector and

3. The existence of a functional sector and donor coordination framework or a commitment by government that steps will be taken towards its development.

With regards to IPA II sectors mentioned above, important sector strategies and respective institution(s) responsible for each sector already exists. The major issue related to these Strategies arises from their timeframe, which, in many instances, does not cover period up to 2020 (period for IPA II programming). Additional issue is related to the Action Plan(s) of the Strategies, as some of the Strategies lack action plans, while other Strategies have Action Plans which do not fully comply to the principles of detailed planning in terms of timing, budget allocation, expected results and performance indicators. This might negatively reflect programming of IPA II, as the priorities could not be directly derived from specific sector documents. As noted above, one of the main criticism of the European Commission has been related to lack of clear and well-defined priorities in the national strategic documents, which should serve as a base for IPA Programming documents. In this perspective, national strategic planning in certain sectors should be strengthened.

Furthermore, as part of the IPA II sector-based approach in programming, each country would need to implement a comprehensive and sound reform of its public financial management system and prepare a multi-annual public financial management reform strategy and an action plan (a public financial management reform programme). Currently, Republic of Macedonia is applying annual (one-year) budget planning. The shift towards multi-annual financial planning would be rather demanding in terms of capacities and coordination among the Ministries cooperating within the frame of the same sector. In addition, the sector approach under IPA II has been related to implementation of sector budget support. According to the European Commision: "Sector Budget Support is the transfer of financial resources from an external financing agency to the National Treasury of a partner country in support of a sector programme, following the respect by the latter of agreed conditions for payment. The financial resources thus received

are part of the global resources of the partner country, and are consequently used in accordance with the public financial management system of the partner country".[19] This implies close cooperation of the country with European Union in public finances management at national level, which would is likely to be challenging for the Republic of Macedonia, as it requires prompt multi-annual public financial management reform.

Additional aspect considered relevant for the increase of the effectiveness of IPA assistance is coordination with other donors. According to the data from the Secretariat for European Affairs of the Republic of Macedonia, the bilateral assistance programmes provided from EU Member States include France, Germany, Italy, the Netherlands and the United Kingdom. Other large bilateral donors include Switzerland and the United States. Multilateral donors include the Council of Europe, the Organization for Security and Co-operation in Europe (OSCE) and the United Nations. The main lenders are the Council of Europe Development Bank (CEB), the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), the International Monetary Fund (IMF) and the World Bank (WB).[20] The donor assistance to the country has significantly decreased over the last years, but there is still need for coordination of the assistance. The Republic of Macedonia applies Programme Based Approach in five programme areas (Business Environment, Human Capital, Agriculture, Environment, and Good Governance) with regards to donor coordination, which could serve as basis for coordination related to programming under IPA II. Nevertheless, it could be argued that the donor coordination is less demanding criteria compared to the previous two – strategic planning and public management reform.

Based on the findings, it could be summarised that programming under sector approach under IPA II would not differ essentially compared to the programming of IPA I for the period 2011-2013. However, the sector approach is expected to give more weight to performance management, through well-set indicators. This is important for improvement of the Programming, as well as measurement of effectiveness of the assistance. In this respect, the duration of the IPA programming process might be decreased, given that well-set priorities and sound measurement system

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[19] Programming Guide for Strategy Papers, European Commission, 2008, p.1 https://ec.europa.eu/europeaid/sites/devco/files/programming-guide-strategy-papers-sector-budget-support-200811_en_2.pdf

[20] http://www.sep.gov.mk/en/content/?id=261#.VHe-pFJ0w5s

would led to better and faster definition of priorities. In purpose of achieving sound results in this field, substantial capacity building of the IPA Operational Structure in the country is needed. That has been an issue of IPA I, too. Sector approach under IPA II entails opportunity for improvement of the efficiency and effectiveness of the process of Programming through improvement of the national strategic planning.

In addition, the genuine challenges with regards to implementation of IPA II largely derive from the identified problems in the implementation of IPA I. In this respect, revision of the documentation and IPA procedures should be undertaken in purpose of optimal use of the capacities. Also, there are some additional challenges, such a shift towards multi annual budgeting, as well as issue of sector budget support, which would be rather demanding for the country. However, it could be argued that solving of majority of the issues related to IPA I would provide more efficient and effective implementation of IPA II.

Conclusion

The EU Instrument for pre-accession assistance (IPA) has been an important instrument for the Western Balkans, providing substantial amount of finances to the countries. The Republic of Macedonia has been entitled to allocation of EUR 619.2m in the IPA I (2007-2013) and EUR 664.2m in IPA II (2014-2020). The use of the financial support has been related to certain criteria, as well as certain procedures defined by the European Union, implying relatively good level of absorption capacity of the country. In this context, the use of the IPA I (due to the available data in 2013) has been assessed as not sufficient, implying the need for increase of the absorption capacity of the respective institutions, as well as addressing other problems detected in the implementation of IPA I.

IPA I has been structured into five Components, but the programming of the IPA I in the Republic of Macedonia for the period 2011-2013 has been done per sectors, which represented announcement of the sector approach under IPA II. The Programming for IPA I (2007-2013) has been marked with the longevity of the process, taking minimum of two years, with weaknesses noted into setting of clear and well-defined priorities into the national

strategic documents. Furthermore, the implementation of IPA also faces many challenges, with significant amount of time devoted to the process of approval of the project tendering documentation by national and EU structures. In this respect, shortcomings in the quality of the tendering documentation could be regarded as main reason for delays in the procedures. This is closely related to the capacity of the relevant institutions. In addition, the system of performance measurement of IPA I has been rather weak, due to the shortcomings in setting measurable impact indicators.

Most of the issues related to IPA I were expected to be prevailed with the sector approach of IPA II. However, this approach is not completely new for the Republic of Macedonia, as sector oriented planning has been applied for IPA I (2011-2013). In this context, programming under sector approach under IPA II would not differ essentially compared to the programming of IPA I for the period 2011-2013. However, the sector approach is expected to give more weight to performance management, through well-set indicators. This is important for improvement of the Programming, as well as measurement of effectiveness of the assistance. In this respect, the duration of the IPA programming process might be decreased, given that well-set priorities and sound measurement system would led to better and faster definition of priorities.

The full implementation of the sector approach under IPA II is related to three criteria, such as existence of relevant strategic documents per sectors and sector budgets, relevant institutions and functional sector and donor coordination. Within the first criteria, each country would need to undertake a multi-annual public financial management reform, which is expected to be the most challenging issue for the Republic of Macedonia. Other criteria seems not to be so critical, while proper strategic planning and ensuring respective budgets needs to be ensured. In purpose of achieving sound results in this field, substantial capacity building of the IPA Operational Structure in the country is needed. In this context, it could be noted that solving majority of the issues related to IPA I would provide more efficient and effective implementation of IPA II, along with addressing the new challenges related to mid-term public financial management.

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TOME NENOVSKI[1]

CAUSES, CONSEQUENCES AND POSSIBLE WAYS FOR COMBATING UNDECLARED ECONOMY IN MACEDONIA

Abstract

The "grey" economy has a serious impact on the micro and macroeconomic performance of the country. High levels of grey economy negatively affect the competitiveness of the formal firms due to unfair competition on the domestic market and regulatory burden. They also deter foreign direct investments, which contributes to lower capital inflows and productivity in the country.

This paper attempts to locate causes, consequences, scope and to estimate the level of grey economy in the Republic of Macedonia, as well as possible ways for combating grey economy in Republic of Macedonia and understand the basic characteristics of the Macedonian case in order to present well-grounded policy recommendations.

The main finding (conclusion) of the paper is the fact that the grey economy in The Republic of Macedonia is a multifaceted phenomenon and the most efficient manner to remove the causes for the occurrence and presence of the grey economy is the improvement of the institutional frame in the country. There is a need for directly focused Government measures that would precipitate the integration of the grey economy in the formal sector, once the right conditions are put in place. The recommendations that this paper promotes will head exactly in that direction.

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Key words: macroeconomics; grey economy; informal economy; formal economy; tax evasion

JEL classification: E6 - Macroeconomic Policy, Macroeconomic aspects of Public Finance, and General Outlook

Introduction

The "grey" economy has a serious impact on the macroeconomic performance of the country. High levels of grey economy negatively affect the competitiveness of the formal firms due to unfair competition on the domestic market and regulatory burden. They also deter foreign direct investments, which contributes to lower capital inflows and productivity in the country. The grey economy directly affects other aspects of social life, such as level of crime, rule of law, social conflict, political instability, etc.

This paper attempts to locate causes, consequences and the scope of grey economy in Republic of Macedonia, as well as to estimate the level of grey economy in the Republic of Macedonia and understand the basic haracteristics of the Macedonian case in order to present well-grounded policy recommendations.

The research is based on several methodologies: qualitative, descriptive, statistic, and comparative. Some study findings and recommendations come out from the survey that was carried out on a sample of 1200 respondents.

During preparing this text a substantial amount of domestic and foreign research was consulted, but the analysis is mainly based on the author's own research because the grey economy has been his analytical preoccupation for a longer period of time.

The main finding of the paper is that the most efficient manner to remove the causes for the occurrence and presence of the grey economy is improvement of the institutional frame in the country. This means improvement of the relations between the government and the economy. The recommendations that this paper promotes will head exactly in that direction.

1. DEFINITION OF GREY ECONOMY

What is grey economy?

There are various definitions that determine grey economy. It seems that the most dominant and most precise definition is the one which brings the grey economy in a tight connection with the officially measured GDP: *It encompasses all the unregistered production activities (the ones that create added value), which ought to be a part of the national production.*[2]

In order to determine the size of the grey economy as correctly as possible, as well as its rate in the GDP, we should bear in mind that: 1) we are talking about the added value, not about all the transactions which take part in the informal sector (for example, the capital revenues are not added value); and 2) the grey economy is not the same as tax evasion (nonpayment of or avoiding to pay taxes), because, paid or unpaid, the taxes represent a transfer, not an expense in the economic sense of the word.

2. SIZE, CAUSES AND CONSEQUENCES OF GREY ECONOMY

In the Republic of Macedonia there is a widely spread opinion that the grey economy (in different periods) has amounted between 40 and 50% of the GDP. The establishment of the "flat" profit personal tax and the "flat" personal income tax in 2007, the intensive fiscalization during the payment in the retail trade, as well as the more and more intensive usage of payment cards for execution of the payment function of money, created the possibility for the grey economy in 2007 to note downward tendency. According to the last (2011) research of the Ministry of economy, the grey economy in the Republic of Macedonia during 2011 was around 30%. In the meantime, the Government of Republic of Macedonia took series of measurements in different fields of socio-economic matters, which caused a decrease of the scope of the grey economy in the country. According to the State Statistical Office, the scope of grey economy in 2013/2014 fell down to approximately 20% of the GDP.

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[2] Frey S. Bruno, Schneider Friedrich, *Informal and Underground Economy*, International Encyclopedia of Social and Behavioral Science, Amsterdam,: Elsevier Science Publishing Company, 2000, p. 2

The existence of still high amount of the grey economy has a direct negative influence on the main economic indicators, categories and instruments for macroeconomic regulation. In addition, three basic problems that the grey economy imposes can be located:

a. *The number of unemployed and socially endangered persons* is analyzed according to the official data from the State Statistical Office. However, their official number does not show what is the number of people that are involved in any kind of unregistered activities and get an appropriate compensation, which, also, is not registered anywhere.

b. The second problem is conceived in the *high sum of evaded tax,* which the participants in the grey economy do not pay. That restricts the fiscal policy in the enhancement of its mechanisms for further tax facilitation of the economic subjects, lower public debt and enhancement of its development component, which would result with GDP incensement and incensement of the number of employed persons, reduction of the number of unemployed persons and social security users, and further reduction of the grey economy in the country.

c. The third problem (which was highly manifested in the Republic of Macedonia for a longer period of time in the past) is the fact that the grey economy, if we could put it like that, points to an *"unhealthy" relationship between the Government and the citizens of the Republic of Macedonia.* The citizens (tax payers) manifest(ed) the disaffection of their economic-social status by transferring to the grey economy, thus enhancing the previously mentioned problems.

The causes which condition and stimulate the grey economy are different. The *unemployment* has the strongest influence on its development. In the period from 1992 to 2010 the number of unemployed persons in the Republic of Macedonia almost doubled (from 180.000 to 321.000 citizens), causing high unemployment rate of around 31%. In the meantime, as a result of various measurements undertaken by the Government of Republic of Macedonia, the number of unemployed people started to decrease and the unemployment rate fell down to 24,6% by 31.12.2015.

The jobs that were previously lost and the lack of more energetic measures of the central government for the creation of new jobs forced those persons to enter the grey economy. That statement confirms the results of the

performed survey[3], according to which the major part of the citizens think that the biggest problem they face is unemployment and poverty (73% of the interviewed) and that inability to satisfy their existential needs has the highest influence on the appearance of the grey economy (29%) and the bad economic situation in the country (27%).

In the past 25 years Macedonian economy has faced a strong development of the private sector and the small and medium size enterprises, with a parallel adoption of incorrect and often confusing *solutions in the economic legislative,* which highly influenced the accelerating size and dynamics of the grey economy in the country.

The over burdening with taxes and contributions was one of the main instigators of the grey economy for a longer period of time. This was happening especially until 2007, during the progressive calculation of the personal income tax, when three tax rates were used (15%, 18% and 24%), depending on the amount of the realized income. In that tax system, the increased personal incomes mean an automatically increased tax burdening (the action of a so-called fiscal drug). The easiest way to avoid this is to report a lower realized income or executing an unregistered activity which does not require tax payment. Aware of those consequences, the Government of the Republic of Macedonia accessed the determination of a so-called flat profit tax and a flat personal income tax in 2007 and 2008, with the parallel reduction of their rates to 12% in 2007, and to 10% in 2008. The effect from those measures is already being felt: the tax payers are more aware on tax ethics, the fluctuation of means in the budget is amazingly getting higher, and the grey economy notes downwards values.

The next more significant cause for the strong presence of the grey economy is the *too emphasized administrative regulation of the "business"*. The establishment of one-stop-shop system and the cutting-down on time for company registration to a maximum of one day, as well as the implementation of the concept of the government for the so-called "Regulatory guillotine" are all directed to the overcoming of that situation, with already visible effects in the domain of the transfer of the informal into formal economy.

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[3] Conducted for the purpose of USAID project "Measuring the Grey Economy in Macedonia and drafting Policy Proposals for Its Integration in the Formal Sector", January 2008 , Skopje

3. SCOPE OF THE GREY ECONOMY

There are numerous causes for the different approaches of identification of the grey economy. That helps determine the size of the eroded taxes and how fast and strong the market forces act and by that, how the size and structure of the GDP in the country is determined.

According to the internationally recognized system of national accounts known as standard SNA-93, the grey economy in the Republic of Macedonia can be located in the following areas[4]:

1) **Underground production:** Execution of permitted activities which are being hidden from the public institutions with the aim to avoid tax or social security contributions payment. Those activities are highly present in the Republic of Macedonia, and mostly, they are present in the execution of activities from wholesale and retail, real estate trade, property rental, hotel and restaurant work, execution of craftwork etc.

2) **Deliberate misreporting.** There is existence of misreporting of incomes or reporting higher expenses than the ones that really took place, with the purpose of avoiding or decreasing the amount that should be paid based on taxes, customs or social security contributions. The most common cases of this kind of grey economy in the Republic of Macedonia are reporting of lower salaries than the real ones (one part through a bank, and the other part in cash), hiring unregistered employees (the biggest part or 22% of the interviewed pointed out that this is the area where the grey economy is most present), execution of unregistered sales in trade, showing higher expenses than the real ones, not registering the total sales in the accounting books (smaller incomes), etc.

3) **Unregistered units**: The informal sector, usually, consists of small production units (mostly family units). They are not registered in the Central Register because they are not requested to do that with the appropriate legislative. Mostly they are established in the area of agriculture, construction, wall painting, service providing, households with small domestic production, tailors, etc.;

4) **Intentionally not registered units:** Having the aim to avoid the payment of different kinds of payments, such as taxes, contributions,

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[4] United Nations Economic Commission for Europe, *Non-observed economy in national accounts (Survey of national practices)*, United Nations, Geneva, 2003, p 2-4.

expenses for protection during work, etc., some enterprises or individuals intentionally do not register themselves in the Central Register or they do not register some part of their activity in order to realize the same purpose. In that case, their whole production or a certain significant part of it, is not registered (reported) and becomes a component of the grey economy. This group of the grey economy covers the unregistered mechanic workshops, print houses, transporters of goods and passengers, carpenters, shoe cleaners, technical support workers, grocery shops, etc.

5) **Performing activities which the companies are not registered for**: In some cases the companies which are registered to perform a certain activity do not engage their selves in it, instead, they perform another activity which is not registered and for which they do not pay the appropriate fees based on taxes, customs, etc. In that way, a company can be registered as a healthcare club or a massage club, and work as a bordello; or a certain night club can perform unregistered gambling activities and not pay any kind of taxes for them;

6) **Other uncovered activities:** Very common, and with a significant influence on the grey economy size, are the activities which are defined as tips, payment of salaries and other contributions for the employees in cash, production of certain products for one's own needs, giving lectures for training of pupils and students, money extortion, sale of all kinds of small goods on the car – fairs, street sellers of different products, goods bought abroad for which the customs tax has not been paid, etc.

Besides this kind of analytical classification of the resources of the grey economy in the Republic of Macedonia, for the statistical needs of the country, and at the same time for the formulation and implementation of the measurements of the macroeconomic policy of the country, an important issue is the distribution of that phenomenon through sectors. Generally, the grey economy is mostly notable in the trade, industry, agriculture, foreign trade and tourism.

4. MEASUREMENT OF THE SIZE THE GREY ECONOMY IN THE REPUBLIC OF MACEDONIA

Measuring the grey economy is not a simple thing. It is especially hard in the countries in transition, such as the Republic of Macedonia, where the major part of the market activities are performed by the numerous new small and medium size enterprises and traders – individuals, where this measurement is much harder to be accomplished than in big enterprises.

In theoretical analyzes and in statistical practices different methods for the measurement of the grey economy are used. Generally, there are three[5] approaches in order to realize that purpose.

4.1. Direct approach

The most simple, and at the same time, most unsafe way to measure the size of the grey economy is performing survey research among the economic subjects where that phenomenon is supposed to be present. The different surveys of that kind refer to the many difficulties for the estimation of the size of the grey economy. Therefore, a part of the interviewed enterprises or individuals avoid giving answers or give incomplete answers to the questions asked. The surveys do not always cover all of the possible participants in the grey economy, and the numbers that figure are too approximate.

Another direct way to measure the grey economy size is to c*ontrol the tax refund or the payment of social security contributions* that the Public Revenue Office executes. In that case the total work of the enterprises is controlled and their real values are discovered. The weakness of that system for measurement of the grey economy is conceived in its stringency to solely tax or contributions (un)payment. Since the tax evasion has a redistributive character, its measurement has a small relevance for the „grey" economy measurement in its definition given in the chapter two of this paper.

Therefore, those two methods do not encompass all the grey activities and cannot measure the development of the grey economy for a longer period of time. But those two direct methods can be very useful while providing information for the activities that are comprised with the term grey economy and for the structure of the persons that are active participants in that phenomenon.

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[5] See more in Frey S. Bruno S., Schneider Friedrich, 2000, p. 3-6

4.2. Indirect approach (measurement of differences)

The definition and different modalities of the grey economy presence refer to the possibilities for its measurement through the identification of the differences that occur between the official and unofficial statistical indicators and in different markets:

a. The persons who work in the informal sector usually spend more than their officially reported income. In countries with a strongly developed IT and record-keeping system, it is possible to confirm that difference on individual's level and on aggregate level. But, in the Republic of Macedonia where this kind of record-keeping is just now starting to be established, it is very hard to find those differences.

b. The next field of measuring is the labor market. The frequent surveys made by State Statistical Office show that the number of unemployed (end of September 2015) in the country is 243.230 persons, while the number of reported persons in Agency for Employment, who are seeking for jobs, was 117.736.That means a big number of persons have provided unofficial working engagement such as self-employment, or are employed by other employers where they get financial payment in cash which is not registered in other places.

c. The newest approach to grey economy measurement through the system for measuring differences is perceived in the differences of the inputs, and especially in the measurement of the differences of electric energy consumption.[6] The meaning of this approach is in the calculation how much electric energy would be normally spent for the production of the national income. The surplus of spent electric energy indirectly leads to a calculation of the production in the grey economy. The advantage of that approach is that it employs easily accessible and quite accurate indicators. On the other hand, its weakness is perceived in the fact that not all activities that the grey economy covers use electric energy.

A general problem of all the previously mentioned approaches for measurement of the differences as a base for measurement of the grey economy is that we must presume that in a certain year the country did not have grey economy. Otherwise, how could we determine the appropriate differences in its expenses?

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[6] Ott Katarina, *The Underground Economy in Croatia,* Institute of Public Finance, 2002, Zagreb, Republic of Croatia, p. 9

4.3. Estimation of the tax evasion

The size of the grey economy can be measured up to a certain level by estimation of the extent of tax evasion.[7] The increase of burdening of the economic subjects with taxes and social security contributions will probably lead to a tax evasion increase. The reverse relation, of course, is always valid. The reduction of the rates of profit tax and personal income tax, as well as of a part of the social security contributions during 2007 and 2008, contributed to a significant decrease of the tax evasion in the Republic of Macedonia, which is manifested with a high increase of incomes in the central budget, bringing it to a level of unplanned and unwanted surplus in certain periods of that year. Those realizations, are, probably the reason for the major part of the citizens (38% of the ones participating in the survey) to positively evaluate the activities of the current Government of the Republic of Macedonia in the direction of grey economy reduction. However, during the implementation of that approach, we should always have in mind the fact that tax evasion can be caused by and be a result of the inadequate legal frame, administrative barriers, low quality public services, incredibility of the judicial system, etc.

5. RECOMMENDATIONS FOR REDUCTION OF THE SIZE OF THE GREY ECONOMY AND ITS TRANSFER INTO THE FORMAL ECONOMY

The previous analysis confirmed that the grey economy represents a challenge, but also a serious risk for the macroeconomic planning and regulation. That imposes the following dilemma during the determination of the activities of the institutions in charge for the reduction of the presence of that phenomenon: a) Increase of the punishments for the participants in the grey economy; b) Determination and tolerance of the optimal size of the grey economy that has a net present price for the economic policy of the country; c) Undertaking no actions and leaving the grey economy develop by itself; d) Abandoning or modifying the policy that generates grey economy. The final solution seems to be the most acceptable in theory and in practice.

a. Since the objective is to reduce the presence of the grey economy in the country, the main recommendation of this research is to direct the

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[7] Ibid, p. 13

activities and measures primarily to stopping and removing the causes, and afterwards punishing the consequences of that phenomenon. It is necessary to broaden the awareness of all the participants in the economic sector for the sake of respect for the regularity and the defined rules of the game, in the direction of enhancement of the institutional frame, judicial arrangement, the moral values and the stimulators of the economic functions in the country.

b. The multi-dimension of the issue, empirically confirmed with the research results, emphasizes the necessity for the government and its institutions to create a different approach for the creation, affirmation and implementation of the economic reforms, with the purpose of restoring the trust of the citizens to the institutions as components of consistent, responsible and non-compromising country.

c. The most efficient manner to remove the causes for the occurrence and presence of the grey economy is improvement of the institutional frame in the country. In order to realize that purpose, the government must improve the laws and remaining regulatory solutions more intensively than the way it is done up to now in certain areas of the economy: introducing high punishments if unregistered employees are found working in the corresponding trade company; the possibilities for usage of the payment instruments such as cash, assignation, compensation etc. (known as "payment with calculation") to be eliminated, in the case when the transaction account of the economic subject is blocked, and with that the possibility of payment of the obligations based on taxes and social security contributions by using those instruments in order to avoid (completely of partially) to be eliminated as well; implementation with an enhanced intensity of the current project "regulatory guillotine", further enhancement of the regulation of the cash payments and consumptions through intensifying the fiscalization process everywhere possible, and obviously very necessary (for example on the green markets); permanent regulation wherever possible of the additional jobs of persons who, besides the regular one, have additional professional engagements (like the case of the medical doctors); capacity building of the Customs Service with the purpose of stopping further forms of grey economy on the big scale as it was in the previous period; energetic implementation in practice of the Law for prevention of money laundering; enhancement of the controlling measures and punishments against the persons who act in unregistered (unreported) forms, but also punishments against the inspectors and custodians, who ease the previously mentioned deviant phenomenon, etc.

e. In the upcoming period there must be a feeling established in the general public that the tax system is stable and that the tax burdening gets lower and lower, as a result of already reduced rates for certain taxes.

f. There is no analysis of the grey economy which does not confirm that its reduction is possible by increasing the country's capacity for increase of the extent and quality of the public services. That imposes the need of organizational enhancement, efficiency, qualification and collaboration between the separate authorities and bodies of the central government, reduction of the influence of the central government to economy, rationalization of the public consumption, improvement of the public sector quality, cutting down of public administration, etc.

g. To all of these measures and activities for fighting the grey economy, the general impression of the establishment of a lasting and sustainable economic growth of the country must be added, and with that, the reduction of unemployment, the improvement of the standard of living and the increase of the tax ethics of the population, which will lead to a drastic reduction of the currently still high rate of grey economy in the Republic of Macedonia.

h. The analysis and the results from the field survey showed[8] that the unreported and unregistered jobs are the main source of grey economy in the Republic of Macedonia. That means that the recommendations and measures for grey economy reduction which are mentioned in this research, as well as other research of the economic policy, should primarily be oriented in that direction.

i. The following forms of action could significantly locate and extend the coverage of the grey economy, together with the usage of appropriate preventive – instructional and punishment measures in order to reduce the presence of the grey economy in the country:

- Enhancement of the controls in the activities (areas) that this research locates as most intensive, regarding the presence of grey economy;

- Based on the indicators obtained with the previously mentioned procedures, the institutions in-charge should execute a theoretical calculation of the size of the value added tax that the subjects obligated by law should pay to the central budget. Based on that, they should have to make approximate estimations for the size of the newly created value in the country and for the areas where that value is created but officially not presented and where in the future

[8] Bogov, D.,*Hidden economy in F.Y.R. of Macedonia and its treatment in the statistical office,* Statistical Office of Republic of Macedonia, 2002.

the measures should be directed (control and punishment measures) in order to fight for maintaining and enhancing the current aggressive campaign of the central government through the public information means on the consequences from the great presence of the grey economy; The statistical system for calculation of GDP should be widening by adding elements that will increase its coverage and with that its authenticity. In that direction, the official statistics, should also import new approaches in that function. The usage of the approach for the spent electric energy, even though is not all-embracing and completely competent, would be a good method for location and evaluation of the major part of the grey economy;

- The further activities of the statistical and controlling institutions should, as much as possible, locate and estimate the amounts of the payments in cash and in kind production for their own needs, size of the tips which become a routine in Macedonian economy etc.

Conclusions

The grey economy represents a significant part of the Macedonian economy. There are different reasons that cause and stimulate grey economy. The strongest influence comes from the high unemployment in the country, confusing legal decisions, great administrative business regulation, intensive private business sector development and other.

Because of its high value, grey economy is challenging and serious danger for macroeconomic planning and regulation. Knowing that the on going Government of the Republic of Macedonia has identified grey economy as one of the important areas that require action.

But, what the program of the Government lacks is direct measures. Namely, the planned activities would indirectly affect grey economy activities and put in place conditions for its integration into the formal sector. However, there is a need for directly focused measures that would precipitate the integration of the grey economy in the formal sector, once the right conditions are put in place. The recommendations of this research are exactly in that direction. The main recommendation is directed towards activities and measures of the authorities for preventing and removing the reasons of the appearance of grey economy and punishing the consequences of this national

economy "evil". The government has to increase the speed for redefining (changing) its role on the market. Finally, there is a need for widening the awareness of all business players for the need of respecting the regularity and playing according to the rules, as well as for enforcing the institutional framework, legal order, moral values and the motivators of the country's functional economy.

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SOCIAL TRANSFER EXPENDITURES IN REPUBLIC OF MACEDONIA, SOUTH EAST EUROPEAN COUNTIRES AND EU COUNTRIES

Abstract

Social transfers and expenditures as a form of social protection are essential for each economy and society to function properly. Social transfers as a form of social protection can vary in dependence of the economic system and development of the country, but initially their purpose is relatively the same. Tackling poverty and enabling efficient social redistribution of the income among the households are one of the main results of the existence of an efficient social protection system. The economies of today are confronted with a serious challenge of tackling the rising poverty and income inequality in the world and one of the means of achieving that is through the social transfer system.

In this article a comparison analysis is made between the social transfer expenditures of Republic of Macedonia, South East European countries and EU countries in order to determine the trends and amount of social transfer

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expenditures in the countries. From the research in this paper it can be seen that Republic of Macedonia has considerably smaller social transfers per capita compared to other countries taken into consideration for the research. More so Republic of Macedonia is the only country form the countries that are part of the comparison analysis that accomplishes negative growth of the social transfer expenditures as a percentage of GDP in the period of year 2001 till year 2014. Knowing the fact that the more equal distribution of assets in a current country can lead to increased consumption, sustainable growth and increases social welfare, Republic of Macedonia can do better if the expenditures for social transfers as a percentage of the GDP are to increase, even on expense on some other public or budget expenditures.

Key words: social protection, social transfer, social expenditures, comparative analysis, inequality

JEL classification: H55

Methodology

The research in this article is conducted using both quantitative and qualitative methods for research. Statistical method as a quantitative method is used to collect the data necessary for comparison of the social transfers of the south-east European countries and countries member of European Union. The data was gathered from the data base of World Bank, OECD data base and Eurostat online sources, research in the field and other written sources. Comparative method is used to compare the social transfer expenditures for Republic of Macedonia, South-east European countries and the countries of European Union. Besides the comparative method, other qualitative methods are used in the process of research and conclusion findings, such as: analytical method, method of deduction and method of induction.

Introduction and theoretical review

Through the past few decades the problem of income inequality and welfare segregation has raised itself into the latter as the most significant for

the economies of the countries worldwide. The recent estimates show that the world's 85 richest people have the same amount of wealth as the poorest 50 percent (3.5 billion people)[4]. Income inequality is a broader concept then poverty. It defines the level of income distribution in a current country. Inequality appears to be increasing in many domains of human welfare including increased economic and social inequality. Even tough inequality can be foreseen as a necessary part of the rewording structure of the modern economic systems which promotes innovation, individuality and entrepreneur initiative; beyond a certain point it can become harmful for the economy and society as hole. High social and economic inequality can lead to high level of poverty and social exclusion, which further compromises the economic growth of the countries.

Social and economic inequality can be a product of variety of different factors in the country's economy. More so redistributive policies which are the central theme of many economic researches through the past decades implicate to the utmost importance of the subject of economic and social inequality, and its effect on the economic development, sustainability and growth. Arthur Okun in his book on the tradeoffs between efficiency and equity and on the efficiency "leaks" showed that efforts to reduce inequality can be transferred into creating more inequality. Examples could include taxes on activities with negative externalities paid mostly by the better-off but harmful to the poor (such as, perhaps, excessive risk-taking in the financial sector), cash transfers aimed at encouraging better attendance at primary schools in developing countries, or spending on public capital or education that benefits the poor[5]. Also some authors believe that government spending in social transfer issues such as healthcare, education, unemployed benefits, child and family allowances and social retirement benefits can also   present a tool for decreasing the economic and social inequality. However, the most important issues connected with the degree of social and economic inequality still remain the factor of unemployment and the degree of poverty in one society.

Social protection is an essential transfer system that relocates income both within and among different households. The main purpose of the social transfers and social protection is to:[6]

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[4]   http://www.oxfam.org/sites/www.oxfam.org/files/bp-working-for-few-political-capture-economic-inequlity-200114-summ-en.pdf (accessed 15 September 2015)
[5] Johnatan D. Ostry, Andrew Berg, and Charalambos G. Tsangarides, *"Redistribution, Inequality and Growth"*, International Monetary Fund, 2014, pg. 11:21
[6] Michael Cichon, Wolfgang Scholz, Arthur Van de Meerendonk, Krzysztof Hagemejer, Fabio Bertranou, Pierre Plamondon, *"Financing social protection"*, International Labor office Geneva, 2004, pg. 12

- Guarantee a minimum level of consumption for people living in poverty or on the threshold in it;

- Replace wholly or in part the income lost as a result of certain contingency, or

- Achieve a higher level of economic and social equality

Furthermore social protection and social transfers can have indirect benefits on the society, like improving the people's productive capacity and helping people to move out of poverty traps by addressing credit constrains.[7]According to James Scot Brooks social transfers also help improve the allocation of household resources in one economy and thus increase overall consumption and support the growth of local economies. However, in order to achieve the maximum growth effects of social transfers it's important to precisely define the context, timing, duration, eligibility and choosing the right recipients for the social transfers. These principles according to the author James Scot Brooks are sufficient to establish an efficient social transfer system for the benefit of one society and economy. Brunori and O'Reilly provide another definition of social protection mainly stating that "social protection is a specific set of public actions to address the vulnerability in people's life via social insurance, offering protection through risk and adversity throughout life; via social assistance, offering payments to support and enable the poor; and via social inclusion efforts that enhance the capability of the marginalized groups to access social insurance and assistance"[8]. UNICEF defines social protection as the set of public and private policies and programs aimed at preventing, reducing and eliminating economic and social vulnerabilities to poverty and deprivation[9].

According to Malte Luebker the system for tackling high social inequality can be achieved through two principal mechanisms. The first mechanism that Malte Lubker considers is the social security systems which can benefit those with the lowest private sector incomes and the second mechanism being progressive tax systems which narrow the gap between rich and poor and thus reduce the income inequality[10]. Thomas Piketty in his

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[7] James Scot Brooks, "Social transfers and growth in poor countries", World poverty Institute, 2010 pg. 61:67

[8] Brunori P., O'Reilly M., "Social protection for development: A review of definitions", European report on development, 2010, pg.12

[9] Winder, Yablonski, "Integrated social protection system", Social Protection Strategic Framework, UNICEF, May 2012, pg 13

[10] Malte Lubker, "*The impact of taxes and transfers on inequality*", International Labor Office Geneva, 2011, pg. 2:3

book, states the differences between the social care in the developed countries on one side and social care of the countries in development on the other. Several differences which mostly concern the amount of social transfers and the practices of distribution of the same makes the system of social transfers in the developed countries much more efficient in the field of regulating the social and economic inequality. Most of all the reconstruction of the methods of the pension systems and methods of the distribution of unemployment transfers presents the main difference between the two social care systems. The developed countries because of their available assets and efficiency can redistribute the income more efficiently than the countries in development, leaving the second ones still dependent from the first. This dependency further increases the economic and social inequality between the countries as well as their social care systems[11].

The difference between the development in the economic systems and social economic policies in the countries had been a cause for development of the four different models for redistribution of the assets, i.e.:[12]

1. "Nordic model" characterized by large and mostly universal cash transfers, a high level of spending on in-kind services and a tax mix which promotes redistribution (all Nordic countries and also Belgium are in this group);

2. A "Continental European model" characterized by large cash transfers with the lion's share for old-age pensions – i.e. redistributing income mostly over the lifecycle instead of across individuals – and a tax mix which does not promote redistribution across individuals, reflecting a small role for the personal income tax (Austria, France and Germany are representative);

3. An "Anglo-Saxon model", characterized by small cash transfers, and a tax mix which promotes income redistribution. This model can be divided in two sub-groups: those countries with transfers highly targeted on low-income groups (Australia and New Zealand being examples) and those countries characterized by little progressivity of cash transfers which are largely spent on old-age pensions (Japan and the United States are in this sub-group);

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[11] Thomas Piketty, "Capital in the twenty first century" President and Fellows of Harvard College, 2014, pg. 332:345
[12] Isabelle Joumard, Mauro Pisu, Debbie Bloch, "*Tackling income inequality-The role of taxes and* transfers", *OECD Journal: Economic Studies* published online first (http://dx.doi.org/10.1787/eco_studies-2012-5k95xd6l65lt), *pg. 3:4*

4. A lower-income group, where the welfare system is not well developed. Spending on transfers and the level of taxation are considerably below the OECD average, with a heavy reliance on consumption taxes.

According to the data gathered from the Statistical office of Republic of Macedonia, the country belongs into the lower income group countries concerning the model for redistribution of the income in the country. More so the heavy reliance on the consumption (indirect taxes) confirms that the place of Republic of Macedonia is in the lower income model group of countries. The subject of this paper concerns the social transfers as a part of the social protection programs in Republic of Macedonia, South Eastern Europe countries and EU countries. Also the main goal is to make a comparative analysis of the social transfer expenditures in Republic of Macedonia, South Eastern Europe countries and EU countries.

1. **REVIEW OF THE SOCIAL PROTECTION SYSTEM AND SOCIAL EXPENDITURES OF REPUBLIC OF MACEDONIA, SOUTH-EAST EUROPEAN COUNTRIES AND EU 28**

As the impact of the financial and economic crisis was felt across the world, the need for social transfers towards the most effected layers of the population has increased. With the increase of the number of socially endangered people, the amounts of the social transfers had also increased in the past few years. According to the date from Eurostat the expenditure on social protection relative to gross domestic product (GDP), has increased by 2.8 percentage points between 2008 and 2009, and continued to rise in the past years.[13] Besides the rise in the social expenditures of the countries in Europe and worldwide, in order to tackle the imposing social and economic inequality new methods and policies for social transfers were also introduced. According to the European legal framework expenditure on social protection includes: social benefits, administration costs (which represent the costs charged to the scheme for its management and administration) and other expenditure (which consists of miscellaneous expenditure by social protection schemes, principally, payment of property income).

Social protection benefits are direct transfers, in cash or in kind, by social protection schemes to households and individuals; the purpose of the

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[13] http://ec.europa.eu/eurostat/statistics-explained/index.php/Social_protection_statistics

transfers is to relieve the recipients of the burden of one or more of the defined risks or needs. Social benefits are paid to households by social security funds, other government units, non-profit institutions serving households (NPISHs), employers administering unfunded social insurance schemes, insurance enterprises, or other institutional units administering privately funded social insurance schemes. Social benefits are recorded without deduction of taxes or other compulsory levies payable by recipients.[14]

Social protection benefits are classified according to eight social protection functions (which represent a set of risks or needs):[15]

- sickness / healthcare benefits — including paid sick leave, medical care and the provision of pharmaceutical products;

- disability benefits — including disability pensions and the provision of goods and services (other than medical care) to the disabled;

- old age benefits — including old age pensions and the provision of goods and services (other than medical care) to the elderly;

- survivors' benefits — including income maintenance and support in connection with the death of a family member, such as a survivors' pensions;

- family / children benefits — including support (except healthcare) in connection with the costs of pregnancy, childbirth, childbearing and caring for other family members;

- unemployment benefits — including vocational training financed by public agencies;

- housing benefits — including interventions by public authorities to help households meet the cost of housing;

- social exclusion benefits not elsewhere classified — including income support, rehabilitation of alcohol and drug abusers and other miscellaneous benefits (except healthcare).

Schemes responsible for providing social protection are financed in different ways. Social protection receipts comprise social security contributions paid by employers and protected persons, contributions by general government, and other receipts from a variety of sources (for example, interest, dividends, rent and claims against third parties). Social contributions by employers are all costs incurred by employers to secure entitlement to social benefits for their employees, former employees and their dependents; they

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[14] Ibidem

[15] Ibidem

can be paid by resident or non-resident employers. They include all payments by employers to social protection institutions (actual contributions) and social benefits paid directly by employers to employees (imputed contributions). Social contributions made by protected persons comprise contributions paid by employees, by the self-employed and by pensioners and other persons.[16]

In Republic of Macedonia according to the Law of Social Protection, social protection is a system of measures, activities and policies for preventing and overcoming the basic social risks such as, poverty reduction and social exclusion and also strengthening the social capacity for social endangered people. Social risk in terms of this law means:[17]

- Health risks (illness, injury and disability);

- Old age and aging;

- Single parent family;

- Risks of unemployment, loss of income for sustenance on work, etc.;

- Risks of poverty and

- Risks of a different kind of social exclusion.

From the legal framework of the social protection in the Republic of Macedonia and EU countries it can be seen that the socio-economic problems that social protection addresses are similar and comparable. As an extension to this on the table presented below, the total social transfer expenditures as a percentage of GDP are shown for Republic of Macedonia, South-east European countries and EU 28. From the research results presented below it can be seen that Republic of Macedonia with 7.96% on average separates the smaller percentage of their GDP as social protection expenditures. On the other side Greece and EU 28 countries spend 28.3% and 28.1% on average respectively form their GDP for the purposes of social protection, in comparison to the countries taken into consideration for the observed period. According to the data presented in Table 1, Romania with 14.6% on average is the closest country to Republic of Macedonia in terms of social transfer expenditures. However the percentage that Romania separates for the purpose of the social transfers is still twice as big as the one of Republic of Macedonia.

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[16]. http://ec.europa.eu/eurostat/statistics-explained/index.php/Social_protection_statistics
[17] Law of Social protection, Official Gazette of Republic of Macedonia number 79, 24 of July 2009, pg.1:2

Table 1 Review of the social transfers as a percentage of GDP in the south-east European countries, EU countries and Republic of Macedonia

Year	Rep. of Macedonia	Serbia	Bulgaria	Greece	Croatia	Slovenia	Romania	EU 28
2001	10.62%							
2002	10.64%			24.0%		24.3%	13.6%	
2003	10.15%			23.5%		23.6%	13.1%	
2004	9.84%		15%	23.6%		23.3%	12.8%	
2005	9.54%	23.8%	15.1%	24.9%	17.5%	23.0%	13.4%	27%
2006	9.34%	24%	14.2%	24.8%	17.7%	22.7%	12.8%	26.6%
2007	7.55%	24.6%	14.1%	24.8%	18.5%	21.3%	13.6%	26.1%
2008	5.67%	23.2%	15.5%	26.2%	18.7%	21.4%	14.4%	26.7%
2009	5.06%	24.6%	17.2%	28.0%	20.8%	24.2%	17.2%	29.6%
2010	6.35%	23.2%	18.1%	29.1%	21.0%	25.0%	17.6%	29.4%
2011	6.15%	24.4%	17.7%	30.2%	20.7%	25.0%	16.4%	29%
2012	6.33%	25.1%	17.4%	31.2%	21.2%	25.4%	15.6%	29.5%
2013	6.26%	25.1%	17.5%	31.8%	21.9%	25.5%	15.1%	29.1%
Average	**7.96%**	**24.2%**	**16.2%**	**28.3%**	**19.8%**	**23.7%**	**14.6%**	**28.1%**

Source:http://ec.europa.eu/eurostat/tgm/table.
do?tab=table&init=1&language=en&pcode=tps00098&plugin=1;
State Statistical Office of Republic of Macedonia

The review presented in Table number 1 can also be used for presenting the growth or decline of the social protections expenditure of the countries taken into consideration for this research. The year to year growth or decline of the countries for the period of the observation is presented in the Table number 2.

In order to equalize the output of the research because of the lack of data for some countries the time period of the observation is narrowed to 9 years. According to the data presented in Table 2, Republic of Macedonia is the only country from the countries taken into consideration that has decline in the expenditures for social transfers. Republic of Macedonia also records the highest decline from year 2006 to year 2007 with 33% decline. The average decline of the social expenditures for Republic of Macedonia is recorded to be 7% on an annual level. However Republic of Macedonia also records the highest growth of the social transfers in one year with 20% growth. The great oscillations of the social transfer expenditures in Republic of Macedonia point

to inconsistent social transfer politics, which can further lead to broadening the gap of poverty and inequality.

Table 2 Review of the growth of social transfer expenditures in the south-east European countries, EU countries and Republic of Macedonia

Year	Rep. of Macedonia	Serbia	Bulgaria	Greece	Croatia	Slovenia	Romania	EU 28
2005	-2%	1%	1%	0%	1%	-1%	-5%	-2%
2006	-24%	2%	-6%	0%	4%	-7%	6%	-2%
2007	-33%	-6%	-1%	5%	1%	0%	6%	2%
2008	-12%	6%	9%	6%	10%	12%	16%	10%
2009	20%	-6%	10%	4%	1%	3%	2%	-1%
2010	-3%	5%	5%	4%	-1%	0%	-7%	-1%
2011	3%	3%	-2%	3%	2%	2%	-5%	2%
2012	-1%	0%	-2%	2%	3%	0%	-3%	-1%
2013	-2%	1%	1%	-2%	1%	-3%	-4%	-2%
Average	**-7%**	**1%**	**2%**	**2%**	**3%**	**0%**	**1%**	**1%**

Source:http://ec.europa.eu/eurostat/tgm/table.
do?tab=table&init=1&language=en&pcode=tps00098&plugin=1;
State Statistical Office of Republic of Macedonia

Despite the case of Republic of Macedonia, other countries taken into consideration for this research have small but consistent growth of their social transfer expenditures. The highest growth between them is achieved by Croatia with 3%, and the lowest growth, or in the case no growth at all in the social transfer expenditures is recorded by Slovenia. For the purpose of the research and broadening the comparison of the social transfer expenditures of the selected countries, below a table is presented which shows the indicator for social transfers per capita in the countries included in the research. The indicator that is per capita social transfers equalizes the countries total social expenditures by dividing them with the total number of the population. Large and economic developed countries can make larger expenditures for social transfers as a percentage from GDP, according to that the indicator that is social transfer expenditures per capita tends to give more equal data for the purpose of comparison. Firstly, the grater the number of population is in the country the greater the expenditures for social transfer will be, and second, more developed countries can have a larger amount of their GDP transferred to their population. However presenting the social transfer expenditures per capita can present a review of this issue which is the most comparable.

Table 3 Review of the social transfer expenditures per capita in the southeast European countries, EU countries and Republic of Macedonia in euros

Year	Rep. of Macedonia	Serbia	Bulgaria	Greece	Croatia	Slovenia	Romania	EU 28
2006	264.86	584.50	495.02	4,640.10	1728.15	3,512.13	591.29	6,176.74
2007	240.68	622.45	576.96	4,950.08	1985.32	3,648.36	809.40	6,528.42
2008	179.79	715.12	732.31	5,470.76	2,070.10	3,937.99	976.84	6,747.57
2009	169.81	854.62	807.72	5,790.63	2,167.64	4,210.18	998.03	7,007.50
2010	222.72	977.30	880.93	5,797.11	2,177.74	4,322.33	1,082.81	7,261.32
2011	218.23	1,049.66	928.11	5,673.12	2,129.78	4,409.55	1,070.21	7,379.28
2012	245.01	1,058.22	952.24	5,471.78	2,150.06	4,358.77	1,079.5	7,638.52
2013	253.80	1,113.13	1,017.13	5,532.80	2,218.95	4,445.68	1,081.05	7,859.34
Average	**224.36**	**871.88**	**798.80**	**5,415.80**	**2,078.5**	**4,105.62**	**961.13**	**7,074.84**

Source:http://ec.europa.eu/eurostat/tgm/table.
do?tab=table&init=1&language=en&pcode=tps00098&plugin=1;

State Statistical Office of Republic of Macedonia

From the presented data in Table 3 it can be seen that Republic of Macedonia has by far the smallest per capita social transfer from the countries included in the research. This data only confirms what previously stated data had shown, i.e. that Republic of Macedonia has relatively small social-economic transfers then other countries taken into consideration, and furthermore these expenditures are in decline. The highest per capita social transfers according to the data in the Table number 3 can be seen in the EU 28 countries which average 7,074.84 euros per capita on annual level. This can be connected to the low socio-economic inequality that EU 28 countries have and also the problem of growing inequality in Republic of Macedonia.

Conclusion

Social transfer expenditures are vital for the economy. Their impact on the social welfare and inequality is considerable and significant. Social transfer expenditures can come in various forms dependent on the purpose for the social transfers and the method used to deliver the transfer to those in need. Countries of European Union and Republic of Macedonia have nearly the same structure for social transfer, i.e.: sickness / healthcare benefits,

disability benefits , old age benefits, survivors' benefits, family / children benefits, unemployment benefits, housing benefits and social exclusion benefits not elsewhere classified. However according to the research in this paper Republic of Macedonia with 7.96% separates the least assets for social transfers as a percentage of their GDP in comparison to the other countries taken into consideration for this research. Republic of Macedonia realized decline in the social expenditure transfers as a percent of GDP, with the average annual decline determined to -7% in the previous 9 years. Still knowing that Republic of Macedonia belongs into the lower income group countries concerning the model for redistribution of the income in the country it is expected that the country can have fewer financial possibilities to assert higher social transfers expenditures. The more developed countries with a larger population separate a higher amount of expenditure for social transfers as a percentage of the GDP. But concerning is the fact that Republic of Macedonia also has the smallest social transfer per capita than the other countries taken into consideration. According to the research Republic of Macedonia realizes only 224.36 euro per capita social transfers annually, as an average value of the period of observations that is 8 years. Knowing the fact that the more equal distribution of assets in a current country can lead to increased consumption, sustainable growth and increases social welfare, Republic of Macedonia should increase the expenditures for social transfers as a percentage of the GDP, even on expense on some other public or budget expenditures. This will eventually lead to better redistribution of the income, thus increasing the consumption and ultimately creating better social and economic equality and sustainable growth of the economy.

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10. *http://www.oxfam.org/sites/www.oxfam.org/files/bp-working-for-few-political-capture-economic-inequlity-200114-summ-en.pdf*

11. *http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tps00098&plugin=1*

12. Law of Social protection, Official Gazette of Republic of Macedonia number 79, 24 of July 2009

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BANK PROFITABILITY PRIOR AND AFTER THE CRISIS: EVIDENCE FROM SELECTED BALKAN TRANSITIONAL ECONOMIES

Abstract

Managing bank profitability during the financial crisis represent a key element in the transitional economies due to the bank based financial system characterized for such economies and lack of developed financial institutions. The focus of the research is primarily connected to statistical modeling of the financial crisis impact on bank profitability indicators. The paper at hand provide general analyzes regarding the profitability indicators of Serbian and Bosnian banks during the same period for a proper comparative perception. Focus on the empirical analysis is banking sector of the Republic of Macedonia. The paper provide and explicit answer if the variables influencing bank profitability before and after the crises are significantly changed in order to shape the management policies for setting a desirable level of banking profitability in the period after the crisis. The implementation of dummy variable and determination of its statistical effects on key profitability indicators expressed through ROAA and ROAE is the another parameter

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of importance as additional component into model analyzes. The statistical tests showed that dummy variable has a negative significance on profitability indicators only for the year 2009 which to some extend was contrary to our previous expectations.

Keywords: ROAE, ROAA, Vector Error Correction Model (VECM), financial crisis, profitability indicator, Macedonian banking sector

JEL classification: G 21.

Introduction and Background

The bank profitability and efficiency indicators traditionally are presented through ROA (Return on Assets) and ROE (Return on Equity). Although there are many other profitability and efficiency measures used in entities performance analyzes, the subject of interest in this research is primarily connected to determinants of key profitability indicators (e.g. ROA and ROE). Independent variables statistical effects on bank profitability indicators could be diverse as a result of:

a) different markets of business operations of the individual banks (central planning, transitional or free markets);

b) different levels of development of the national economy (advanced economies, emerging and developing economies or least developed countries);

c) different bank size (large, medium and small entities);

d) ownership of the bank (state or private owned bank; domestic or foreign bank);

e) time periods of analyzes (during normal or crisis periods) and many other parameters.

The paper attempts to determine a model which could answer the questions related to the influence of the global financial crisis on Macedonian banking sector, especially on the key profitability indicators (expressed via ROAA and ROAE). The paper also presents analyzes of some of the crisis effects on Serbian and Bosnian banking sector for the same period,

as a basic for further research activities and regional trends profitability movement perception.

1. LITERATURE REVIEW

Recent financial crisis is subject of interest in many research articles. The crisis and its effects on the economy as well as its consequences on the financial sector are analyzed from different perspectives through the application of various models and testing procedures. The reason for this type of treatment of bank profitability management during the crisis are undoubtedly a result of its broad influence on different markets (developed, developing; free or transitional; etc.). We observe the research results into two parts: General considerations of crisis effects on bank profitability management and the effects of individual independent variables on bank profitability indicators.

1.1. General considerations related to crisis effects on bank profitability management

The research of Ksantini and Boujelbène (2014), related to the impact of the financial crisis on growth and investment, points that crisis negative effects are not only on the financial sector, but also on the entire real economy. This authors concluded that last subprime crisis, have a negative impact on the level of activity of major industrial countries, emerging countries as well as on the developing countries (Ksantini/Boujelbene 2014 p.36). According to Lall (2014), understanding how bank profitability factors behave under financial crises could provide useful insights into addressing the bank failure problems. This author noted that bank failure problem is basically a profitability problem (Lall 2014).

The earnings volatility of financial institutions during crisis is another aspect that should be considered into bank profitability and efficiency analyses. According to Shehzad, Choudhry Tanveer and Scholtens, Bert and de Haan, Jakob, (2009), in the wake of financial crisis banks earnings volatility was higher for small banks than for large banks. Their tests on the effect of financial crisis on bank earnings volatility was proxied by volatility

of ROA and was conditional on relative bank size and market concentration for about 1800 banks from both OECD and non-OECD countries in the period 1998-2008 (Shehzad, Choudhry Tanveer/Scholtens; Bert /de Haan, Jakob 2009). Similar results were obtained through the research of Jakob de Haan and Tigran Poghosyan, 2011 showing that larger banks have lower earnings volatility compared to smaller banks. They note the inverse relationship become stronger during the recent financial crisis (de Hann/ Poghosyan 2011).

In the following subsections the findings of some of the authors related to the effects of previously mentioned internal independent variables of ROA and ROE are presented.

1.2. Studies related to non-performing loans effects on bank profitability

As an independent variable of interest, most of the research articles related to bank profitability found that non-performing loans are significantly and negatively impacting the bank profitability. Such findings are confirmed in F. Khan, Ahmad Anuar, Choo and H. Khan (2011) related to Pakistani Banking Sector, Trujillo-Ponce (2012) who detected negative and significant relationship between bank profitability and loan quality measured either through the doubtful assets ratio or the loan loss provisions on the Spanish banking sector, Alper/Anbar (2011), in empirical evidence from the Turkey, Ongore/Kusa (2013) also find the negative effects of non-performing loans to total loans as independent variable on ROA, ROE and NIM as dependent variables obtained from commercial bank performance analyzes in Kenya, etc.

1.3. Articles related to capital adequacy ratio effects on bank profitability

Allen N. Berger and Christa H.S. Bouwman (2011) in its research about the capital and its related effect on bank performance during the financial crisis, found two main results as follows: 1) Capital enhances the performance of all sizes of banks during *banking crises*; 2) During *normal times* and *market crises*, capital helps only small banks unambiguously in all performance dimensions; it helps medium and large banks improve only profitability during market crises and only market share during normal times. Other authors examined the effect of capital reserves on the stability of banks

during the crisis by measuring the relationship between bank performances and their capital ratios during the period 2004 – 2009 (T.E.Deijen 2010). The paper concluded that during the crisis years a higher level of capital reserves was even associated with negative figures for some performance variables.

In its research related to profitability of banks during and before the international financial crisis related to the evidence from Tunisian banking sector, Houssem Rachdi (2013) found that before the US subprime crisis, capital adequacy, liquidity, bank size and yearly real GDP growth affect positively the performance of the banking sector. This author founds that during crisis period, bank profitability is mainly explained by operational efficiency, yearly growth of deposits, GDP growth and inflation (Rachdi 2013). In some research findings related to profitability determinants of banking sector, authors concluded that capital ratio effects could be different for ROA and ROE. As an example, in the case of Switzerland banks, the capital ratio (defined as equity over total assets) effect, was positive and significant on ROAA, but negative impact on ROAE (Dietrich/Wanzenried, 2009).

1.4. Studies related to staff/personnel costs and its effects on bank profitability

The expectations about the effects of operational costs (and personnel costs as a significant part of them) on bank profitability are generally negative, but there are some opposite findings. Empirical findings from Tunisian banking sector, showed that OVERHEAD (Overhead is defined as the sum of salaries and other operating expenses) has positive and significant effect on profitability expressed through ROA and NIM (Naceur/Goaied 2008). According to these authors, the positive effect of OVERHEAD on ROA should mean that a more motivated staff contribute to the profitability of the banking industry as overhead is mainly composed by wages (Naceur/Goaied 2008). Similar results were obtained for Macedonian banking sector (Poposka/Trpkoski 2013). The authors concluded that variable Personnel costs/Non-interest costs (PC/NIC) has a positive statistical significance on profitability (analyzed through ROAA and ROAE) which was contrary to the influence of the total non-interest expenses as a single (cumulative) variable on the same dependent variables (Poposka/Trpkoski 2013).

1.5. Bank liquidity parameters and its effects on bank profitability

There are different findings regarding the influence of liquid assets on bank profitability. The research of Canadian and US banks showed that there is a point beyond which holding further liquid assets diminishes banks profitability (Bordeleau/Graham 2010). Results of Kenyan banking sector showed that relationship between the liquidity and the performance of commercial banks is not strong (Ongore/Kusa 2013). The results obtained from Turkish banking sector show that liquidity and concentration were the most significant determinants of conventional national banks performance (Kakilli Acaravci, S.,/**Çalim, A.E.** 2013).

2. COMPARATIVE ANALYZES OF SELECTED BALKAN TRANSITIONAL ECONOMIES

Although the dependence on bank profitability analyzed through ROAA and ROAE was into the focus of research activities of many authors, according to our knowledge there is modest literature related to dummy variables introduction and tests on banking profitability and efficiency associated with the crisis period, especially research articles related to Macedonian, Serbian and Bosnian banking sector. Another potential problem related to the profitability model analyzes related to the banks from these economies is modest time series statistical data (e.g. secondary sources published data on the whole banking sector level) that could be used for activities of this type.

Our expectations were that crisis effects on bank profitability for the mentioned economies were mostly noticeable at the start of 2009. These expectations were based on the data for profitability indicators presented in Graph 1 and Graph 2.

Graph 1 Profitability indicator ROAA of the Macedonian, Serbian and Bosnian banks for the period 2006 Q4 –2014 Q3
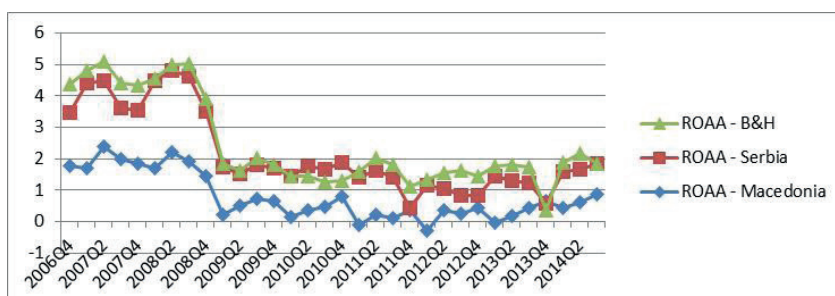
Graph 2 Profitability indicator ROAE of the Macedonian, Serbian and Bosnian banks for the period 2006 Q4 –2014 Q3
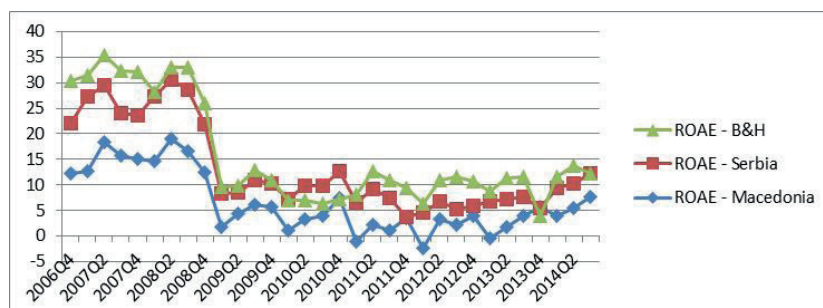
Source: Central banks of selected economies.

For all three economies, the results for the start of the financial crisis were quite similar for ROAA and ROAE as well, although it's obviously that Macedonian economy have the lowest ROAA and ROAE approximately for the whole period of analyzes. All three economies analyzed through banking sector ROAA and ROAE have a higher profitability in the period 2006Q4-2008Q4. Unfortunately due to lack of relevant statistical data for all three economies regarding the independent model variables influencing ROAA and ROAE the following section of this research article is focused primarily on Macedonian banking sector.

3. DATA DESCRIPTION AND SPECIFICATIONS
OF THE MODEL

The model is focused on determination of the statistical influence on selected independent indicators on ROAA and ROAE as dependent variables. The following independent variables were observed:

1. Non-performing loans/Gross loans (NPL/GL) – it's expected that this variable should change into opposite direction with ROAA and ROAE;

2. Capital adequacy ratio (CAR) – intuitively, higher capital could lead to lower ROE. Previous research findings indicated that CAR impact on Macedonian banks ROAA and ROAE is statistically significant and negative;

3. Personnel costs/Non-interest costs (PC/NIC) – previous research showed that this variable has statistically significant and positive effect on the observed dependent variables (Poposka/Trpkoski 2013) ;

4. Highly liquid assets/Total assets (HLA/TA) although the literature findings regarding this variable are mixed, in one of our previous research, results indicated that this variable is statistically significant and positive (Poposka/Trpkoski 2013).

Furthermore dummy variable was introduced to provide information about the relevant time period of crisis impact on key profitability indicators (ROAA and ROAE). Our initial expectations were that crisis effect on Macedonian economy and banking sector profitability were most noticeable during the period 2009-2011. Time series data for statistical testing purposes were obtained on quarterly basis for the period 2006 Q1 – 2014 Q3. The values of individual independent and dependent variables into the time series format, are presented in Table 1.

Table 1. Financial Soundness Indicators of the Macedonian Banking System, 2006Q1 -2014Q3

PERI-OD	Dummy variables			Independent variables				Dependent variables	
	DUM-MY 1	DUM-MY 2	DUM-MY 3	NPL/GL*	CAR	HLA/TA**	PC/NIC	ROAA***	ROAE***
2006Q1	0,00	0,00	0,00	14,10	20,50	15,50	42,30	1,900	12,300
2006Q2	0,00	0,00	0,00	13,50	19,60	15,90	42,30	1,200	8,000
2006Q3	0,00	0,00	0,00	12,11	19,30	16,20	42,20	1,700	11,100
2006Q4	0,00	0,00	0,00	11,25	18,31	18,00	41,13	1,780	12,322
2007Q1	0,00	0,00	0,00	10,28	17,90	17,90	38,90	1,700	12,700
2007Q2	0,00	0,00	0,00	9,99	18,00	20,60	38,70	2,400	18,300
2007Q3	0,00	0,00	0,00	9,14	17,20	18,80	38,40	2,000	15,800
2007Q4	0,00	0,00	0,00	7,52	17,00	20,90	38,42	1,835	15,004
2008Q1	0,00	0,00	0,00	7,20	15,90	18,10	37,70	1,700	14,700
2008Q2	0,00	0,00	0,00	6,88	15,60	18,20	38,20	2,200	19,100
2008Q3	0,00	0,00	0,00	6,58	15,00	17,60	38,00	1,900	16,500
2008Q4	0,00	0,00	0,00	6,75	16,16	16,90	36,53	1,438	12,539
2009Q1	**1,00**	0,00	0,00	7,46	16,54	15,90	36,60	0,218	1,844
2009Q2	**1,00**	0,00	0,00	8,60	16,42	15,80	36,77	0,518	4,329
2009Q3	**1,00**	0,00	0,00	9,45	16,49	17,80	36,88	0,708	6,035
2009Q4	**1,00**	0,00	0,00	9,08	16,40	20,60	36,90	0,645	5,629
2010Q1	0,00	**1,00**	0,00	9,68	16,80	22,00	37,10	0,131	1,139
2010Q2	0,00	**1,00**	0,00	10,10	16,50	23,70	36,20	0,361	3,183
2010Q3	0,00	**1,00**	0,00	10,65	16,39	24,00	36,26	0,454	3,995
2010Q4	0,00	**1,00**	0,00	9,27	16,10	25,30	36,10	0,800	7,340
2011Q1	0,00	0,00	**1,00**	9,36	16,80	24,20	34,50	-0,100	-1,000
2011Q2	0,00	0,00	**1,00**	9,25	16,54	24,70	34,91	0,229	2,125
2011Q3	0,00	0,00	**1,00**	9,83	16,70	23,30	34,70	0,100	1,000
2011Q4	0,00	0,00	**1,00**	9,90	16,80	25,30	34,10	0,370	3,440
2012Q1	0,00	0,00	0,00	10,21	17,50	26,53	34,58	-0,276	-2,455
2012Q2	0,00	0,00	0,00	9,99	17,38	26,50	32,86	0,363	3,213
2012Q3	0,00	0,00	0,00	10,91	17,06	27,47	33,51	0,256	2,273
2012Q4	0,00	0,00	0,00	10,49	17,12	29,45	33,09	0,427	3,847
2013Q1	0,00	0,00	0,00	11,85	17,33	29,62	35,25	-0,047	-0,426
2013Q2	0,00	0,00	0,00	12,27	17,35	28,67	35,47	0,198	1,770
2013Q3	0,00	0,00	0,00	11,77	17,30	28,76	35,62	0,442	3,931
2013Q4	0,00	0,00	0,00	11,51	16,85	27,29	34,98	0,640	5,702
2014Q1	0,00	0,00	0,00	11,14	16,65	27,37	35,64	0,446	3,963
2014Q2	0,00	0,00	0,00	11,84	16,92	25,96	35,55	0,614	5,385
2014Q3	0,00	0,00	0,00	12,25	16,47	27,68	35,83	0,850	7,579

Sources: NBRM's Financial Stability Unit (except for DUMMY variables). http://www.nbrm.mk/?ItemID=3094889810EE20458F9308EAEB1ABC83

* The indicator refers to loans to the nonfinancial sector.

** Highly liquid assets are defined as cash and balances with the NBRM, placements in short-term instruments issued by the state, NBRM bills, and correspondent accounts, sight deposits and overnight deposits with foreign banks. Assets in domestic banks are excluded from total assets.

***Annualized and adjusted for unrecognized impairment. Since 31.03.2009 these items have been adjusted for unrecognized impairment.

The dummy variable has a value of 0 or 1 (for 2009, 2010 or 2011), depending on each individual model iteration (first, second or third).

Model specifications and statistical tests are organized into the following order:

1. Johansen co-integration test–should provide information about time series co-integration (if any). Two types of Johansen test (trace and max - eigen) were performed;

2. Identification of proper method (VAR or Vector Error Correction Model), depending on the results obtained through Johansen co-integration test;

3. Generation of system of equation – used for determination of statistical significance of previously identified independent variables, as well as for the dummy variable via least squares method;

4. Determination of statistical significant variables and testing equation that excludes the irrelevant factors (reduced form model);

5. Statistical tests of the final model - that should present the relevant information about individual impact of each independent variable on key profitability indicators (ROAA and/or ROAE);

6. Determination of statistical relevance of the model – serial correlation test (Breusch-Godfrey Serial Correlation LM Test), Heteroskedasticity Test (in our case through the ARCH effect test), determination the type of distribution of variables and detection of eventual structural shocks (with the CUSUM test).

The model will be performed into three iterations for ROAA and ROAE.

4. EMPIRICAL FINDINGS

Before the analyzes the results, we specify that during the crisis period (even in the low profitability environment), none of the Macedonian banks was insolvent or failed, which lead us to conclusion that bank profitability management adequately responded to the negative impact of global financial crisis. The results obtained from Johansen co-integration test (presented in Table 2), showed that time series data of variables, subject of interest are co-integrated.

Table 2 Results of Johansen co-integration test for ROAA and ROAE as dependent variables

Date: 02/28/15 Time: 00:21 (for ROAA); Time: 01:04 (for ROAE)

Sample (adjusted): 2007Q1 2014Q3

Included observations: 31 after adjustments

Trend assumption: Linear deterministic trend

Series: ROAA NPL_GL CAR PC_NIC HLA_TA ; ROAE NPL_GL CAR PC_NIC HLA_TA

Lags interval (in first differences): 1 to 3

ROAA

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0,05 Critical Value	Prob.**
None*	0.805616	121.7149	69.81889	0.0000
At most 1*	0.695555	70.93931	47.85613	0.0001
At most 2*	0.493205	34.07210	29.79707	0.0152
At most 3	0.303357	13.00301	15.49471	0.1147
At most 4	0.056321	1.797045	3.841466	0.1801

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

ROAE

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0,05 Critical Value	Prob.**
None*	0.810354	120.5306	69.81889	0.0000
At most 1*	0.671590	68.99018	47.85613	0.0002
At most 2*	0.502171	34.47196	29.79707	0.0135
At most 3	0.282593	12.84953	15.49471	0.1204
At most 4	0.079087	2.554077	3.841466	0.1100

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0,05 Critical Value	Prob.**
None *	0.805616	50.77556	33.87687	0.0002
At most 1 *	0.695555	36.86721	27.58434	0.0024
At most 2	0.493205	21.06909	21.13162	0.0510
At most 3	0.303357	11.20597	14.26460	0.1442
At most 4	0.056321	1.797045	3.841466	0.1801

Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

1 Cointegrating Equation(s):   Log likelihood   -44,83867

Normalized cointegrating coefficients (standard error in parentheses)

ROAA	NPL_GL	CAR	PC_NIC	HLA_TA
1.000000	-10,72887	3.139444	14.88408	8.477493
	(2.18762)	(2.33476)	(2.26721)	(1.21358)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0,05 Critical Value	Prob.**
None *	0.810354	51.54042	33.87687	0.0002
At most 1 *	0.671590	34.51822	27.58434	0.0055
At most 2 *	0.502171	21.62243	21.13162	0.0426
At most 3	0.282593	10.29545	14.26460	0.1932
At most 4	0.079087	2.554077	3.841466	0.1100

Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

1 Cointegrating Equation(s):   Log likelihood   -111,1817

Normalized cointegrating coefficients (standard error in parentheses)

ROAE	NPL_GL	CAR	PC_NIC	HLA_TA
1.000000	-30,95269	7.374882	43.87309	25.55579
	(6.41296)	(7.02932)	(6.73716)	(3.61279)

Source: Individual calculations based on the time series data for the banking sector, published by National Bank of Macedonia. http://www.nbrm.mk/?ItemID=3094889810EE20458F9308EAEB1ABC83.

The calculated values with the two types of Johansen test (trace and Max–eigen) indicated 3 e.g. 2 co-integrated equations at 0.05 level of significance for ROAA and 3 co-integrated equations with both types of Johansen tests for ROAE. With the co-integration equation (1) presented in the same table and its normalized coefficients (and standard errors) obtained as a part of Johansen test, the following aspects should be noted:

1. Non-performing loans/Gross loans (NPL/GL)–the movement of the variable has opposite direction from ROAA and ROAE, ie. in line with our initial expectations;

2. Capital adequacy ratio (CAR) – equation results indicated that variable movement is in the same direction with profitability indicators (ROAA and ROAE), which to some extent is contrary to our initial expectations;

3. Personnel costs/Non-interest costs (PC/NIC)–this variable moves into the same direction with the dependent variables (ROAA and ROAE) e.g. according to our initial expectations;

4. Highly liquid assets/Total assets (HLA/TA)-this variable moves into the same direction with the dependent variables (ROAA and ROAE) e.g. according to our initial expectations.

The co-integration test results determine that Vector Error Correction Model (VECM) as a proper statistical procedure should be used. The VECM method calculated values are presented in Table 3. The results of generated by the equation system are presented in Table 4 and reduced equation regression model results in Table 5.

Table 3 Vector error correction model estimated results (*Iteration with DUMMY VARIABLE FOR 2009*)

Date: 02/28/15   Time: 00:30 (for ROAA); Time: 01:10 (for ROAE)

Sample (adjusted): 2007Q1 2014Q3

Included observations: 31 after adjustments

Standard errors in ( ) & t-statistics in [ ]

	ROAA					ROAE				
Cointegrating Eq:	CointEq1	CointEq2	CointEq3		Cointegrating Eq:	CointEq1	CointEq2	CointEq3		
ROAA(-1)	1.000000	0.000000	0.000000		ROAE(-1)	1.000000	0.000000	0.000000		
NPL_GL(-1)	0.000000	1.000000	0.000000		NPL_GL(-1)	0.000000	1.000000	0.000000		
CAR(-1)	0.000000	0.000000	1.000000		CAR(-1)	0.000000	0.000000	1.000000		
PC_NIC(-1)	-2,254174	-10,05548	-28,81393		PC_NIC(-1)	-23,48847	-10,00668	-34,76663		
	(1.37983)	(4.42324)	(14.6075)			(9.87042)	(3.26707)	(13.0310)		
	[-1.63366]	[-2.27333]	[-1.97254]			[-2.37968]	[-3.06290]	[-2.66799]		
HLA_TA(-1)	1.198355	1.964992	8.973515		HLA_TA(-1)	4.313276	-0,096737	2.573369		
	(0.64256)	(2.05981)	(6.80240)			(4.44895)	(1.47258)	(5.87354)		
	[1.86497]	[0.95397]	[1.31917]			[0.96951]	[-0.06569]	[0.43813]		
C	53.57232	309.9336	822.7978		C	746.3494	355.1990	1184.550		

Error Correction:	D(ROAA)	D(NPL_GL)	D(CAR)	D(PC_NIC)	D(HLA_TA)	D(ROAE)	D(NPL_GL)	D(CAR)	D(PC_NIC)	D(HLA_TA)
CointEq1	0.785658	-0,167675	-0,731121	0.707213	0.892762	1.126221	0.001367	-0,125642	0.144085	0.081978
	(0.19712)	(0.43300)	(0.33508)	(0.63199)	(0.43844)	(0.29810)	(0.07211)	(0.05591)	(0.10573)	(0.07443)
	[3.98575]	[-0.38724]	[-2.18192]	[1.11903]	[2.03622]	[3.77803]	[0.01896]	[-2.24719]	[1.36276]	[1.10144]
CointEq2	0.560105	0.320035	-0,506228	1.033951	1.982403	5.421777	0.434329	-0,582139	1.138728	1.876810
	(0.20536)	(0.45111)	(0.34910)	(0.65842)	(0.45678)	(1.95723)	(0.47344)	(0.36710)	(0.69420)	(0.48867)
	[2.72740]	[0.70944]	[-1.45010]	[1.57034]	[4.33994]	[2.77013]	[0.91739]	[-1.58580]	[1.64035]	[3.84063]
CointEq3	-0,244099	-0,075931	0.223482	-0,372606	-0,692134	-2,221432	-0,103511	0.242696	-0,38626	-0,540781
	(0.07803)	(0.17141)	(0.13265)	(0.25019)	(0.17357)	(0.68764)	(0.16634)	(0.12897)	(0.24389)	(0.17169)
	[-3.12814]	[-0.44297]	[1.68475]	[-1.48931]	[-3.98770]	[-3.23053]	[-0.62230]	[1.88176]	[-1.58372]	[-3.14982]

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D(ROAA(-1))	-1,595177	-0,657225	0.639822	-1,18593	-0,9225	-1,778899	-0,113064	0.099376	-0,180141	-0,075745
	(0.35674)	(0.78363)	(0.60642)	(1.14375)	(0.79348)	(0.42733)	(0.10337)	(0.08015)	(0.15157)	(0.10669)
	[-4.47159]	[-0.83870]	[1.05508]	[-1.03688]	[-1.16260]	[-4.16280]	[-1.09379]	[1.23987]	[-1.18852]	[-0.70993]
D(ROAA(-2))	-1,710795	-1,246621	1.111523	-1,665757	-0,100854	-1,831775	-0,194488	0.139581	-0,213944	0.017496
	(0.38920)	(0.85494)	(0.66160)	(1.24783)	(0.86568)	(0.45167)	(0.10926)	(0.08472)	(0.16020)	(0.11277)
	[-4.39568]	[-1.45814]	[1.68004]	[-1.33492]	[-0.11650]	[-4.05554]	[-1.78010]	[1.64765]	[-1.33547]	[0.15515]
D(ROAA(-3))	-1,175201	0.116844	0.930580	-0,046418	-0,25374	-1,358849	-0,013916	0.121185	-0,019108	-0,013029
	(0.27759)	(0.60977)	(0.47188)	(0.89000)	(0.61744)	(0.31588)	(0.07641)	(0.05925)	(0.11204)	(0.07887)
	[-4.23359]	[0.19162]	[1.97207]	[-0.05216]	[-0.41096]	[-4.30177]	[-0.18213]	[2.04545]	[-0.17055]	[-0.16520]
D(NPL_GL(-1))	-0,431343	-0,287033	0.662137	-0,52085	-0,770087	-4,538147	-0,437578	0.704076	-0,587991	-0,703256
	(0.25824)	(0.56726)	(0.43899)	(0.82796)	(0.57439)	(2.35410)	(0.56944)	(0.44153)	(0.83496)	(0.58776)
	[-1.67032]	[-0.50600]	[1.50834]	[-0.62908]	[-1.34069]	[-1.92776]	[-0.76843]	[1.59461]	[-0.70421]	[-1.19650]
D(NPL_GL(-2))	0.082619	-0,073411	0.403080	0.185065	0.015652	-0,344815	0.005913	0.484492	0.141391	-0,002782
	(0.14848)	(0.32616)	(0.25240)	(0.47605)	(0.33026)	(1.30357)	(0.31533)	(0.24450)	(0.46236)	(0.32547)
	[0.55643]	[-0.22508]	[1.59696]	[0.38875]	[0.04739]	[-0.26452]	[0.01875]	[1.98159]	[0.30581]	[-0.00855]
D(NPL_GL(-3))	-0,060822	0.217775	0.006998	0.359724	-0,251135	-1,138271	0.313749	0.065325	0.304461	-0,295347
	(0.16287)	(0.35777)	(0.27687)	(0.52219)	(0.36227)	(1.46304)	(0.35390)	(0.27441)	(0.51892)	(0.36529)
	[-0.37344]	[0.60869]	[0.02528]	[0.68887]	[-0.69322]	[-0.77802]	[0.88655]	[0.23806]	[0.58672]	[-0.80854]
D(CAR(-1))	0.143967	-0,417734	-0,630765	-0,840293	0.009184	1.838646	-0,442637	-0,676062	-0,785143	-0,063594
	(0.20785)	(0.45658)	(0.35333)	(0.66641)	(0.46232)	(1.85711)	(0.44922)	(0.34832)	(0.65869)	(0.46368)
	[0.69264]	[-0.91492]	[-1.78519]	[-1.26093]	[0.01986]	[0.99006]	[-0.98533]	[-1.94093]	[-1.19198]	[-0.13715]
D(CAR(-2))	-0,347097	-0,721011	-0,024758	-1,570038	-0,707892	-1,946322	-1,022937	-0,151924	-1,484761	-0,663626
	(0.25517)	(0.56053)	(0.43377)	(0.81813)	(0.56757)	(2.37899)	(0.57546)	(0.44620)	(0.84379)	(0.59398)
	[-1.36024]	[-1.28631]	[-0.05708]	[-1.91907]	[-1.24722]	[-0.81813]	[-1.77759]	[-0.34048]	[-1.75963]	[-1.11726]
D(CAR(-3))	0.168934	-0,89659	-0,151952	-1,282575	0.214999	2.090149	-1,04358	-0,223314	-1,105938	0.234945
	(0.23866)	(0.52426)	(0.40570)	(0.76518)	(0.53085)	(2.18645)	(0.52889)	(0.41009)	(0.77550)	(0.54590)
	[0.70784]	[-1.71021]	[-0.37454]	[-1.67616]	[0.40501]	[0.95596]	[-1.97316]	[-0.54455]	[-1.42610]	[0.43038]
D(PC_NIC(-1))	0.140521	0.319596	-0,28997	0.447710	0.873600	1.546604	0.373113	-0,298705	0.466330	0.848860
	(0.17788)	(0.39074)	(0.30238)	(0.57030)	(0.39565)	(1.58151)	(0.38256)	(0.29663)	(0.56094)	(0.39486)
	[0.78998]	[0.81793]	[-0.95897]	[0.78504]	[2.20802]	[0.97793]	[0.97531]	[-1.00701]	[0.83134]	[2.14975]

D(PC_NIC(-2))	-0,044647	0.196380	-0,104092	0.035820	0.583608	0.007400	0.151642	-0,136727	0.055073	0.580638
	(0.10816)	(0.23759)	(0.18386)	(0.34677)	(0.24057)	(0.97442)	(0.23571)	(0.18276)	(0.34561)	(0.24329)
	[-0.41279]	[0.82656]	[-0.56615]	[0.10330]	[2.42590]	[0.00759]	[0.64335]	[-0.74811]	[0.15935]	[2.38661]
D(PC_NIC(-3))	0.160077	0.027988	-0,062982	-0,030482	0.276642	1.399763	0.026881	-0,068825	0.012339	0.266283
	(0.08968)	(0.19699)	(0.15245)	(0.28752)	(0.19947)	(0.78741)	(0.19047)	(0.14769)	(0.27928)	(0.19660)
	[1.78501]	[0.14207]	[-0.41314]	[-0.10601]	[1.38689]	[1.77768]	[0.14113]	[-0.46602]	[0.04418]	[1.35446]
D(HLA_TA(-1))	0.049661	0.161706	-0,043943	-0,058951	0.133182	0.874031	0.149200	-0,095426	-0,003764	0.113239
	(0.05323)	(0.11693)	(0.09048)	(0.17066)	(0.11840)	(0.52007)	(0.12580)	(0.09754)	(0.18446)	(0.12985)
	[0.93298]	[1.38297]	[-0.48564]	[-0.34543]	[1.12488]	[1.68061]	[1.18600]	[-0.97830]	[-0.02041]	[0.87209]
D(HLA_TA(-2))	0.123406	-0,039217	-0,080817	0.121347	0.406504	1.316201	-0,027432	-0,099255	0.156650	0.407468
	(0.06027)	(0.13239)	(0.10245)	(0.19324)	(0.13406)	(0.52950)	(0.12808)	(0.09931)	(0.18780)	(0.13220)
	[2.04753]	[-0.29622]	[-0.78881]	[0.62797]	[3.03229]	[2.48576]	[-0.21417]	[-0.99943]	[0.83412]	[3.08215]
D(HLA_TA(-3))	-0,050709	0.000443	-0,129088	0.247886	0.241504	-0,374959	0.020807	-0,12877	0.247649	0.234099
	(0.06200)	(0.13620)	(0.10540)	(0.19879)	(0.13791)	(0.55717)	(0.13478)	(0.10450)	(0.19762)	(0.13911)
	[-0.81786]	[0.00325]	[-1.22475]	[1.24697]	[1.75116]	[-0.67298]	[0.15438]	[-1.23223]	[1.25317]	[1.68282]
C	0.010939	-0,137403	-0,063065	-0,653213	0.597971	0.721288	-0,146952	-0,094808	-0,601442	0.603221
	(0.10097)	(0.22179)	(0.17164)	(0.32372)	(0.22458)	(0.85904)	(0.20780)	(0.16112)	(0.30469)	(0.21448)
	[0.10834]	[-0.61952]	[-0.36744]	[-2.01784]	[2.66262]	[0.83965]	[-0.70719]	[-0.58843]	[-1.97397]	[2.81247]
DUMMY	-1,352871	0.044757	0.411286	0.378980	-2,360079	-12,74848	-0,209246	0.464291	0.220678	-2,188126
	(0.36212)	(0.79545)	(0.61557)	(1.16102)	(0.80545)	(3.30643)	(0.79980)	(0.62015)	(1.17274)	(0.82553)
	[-3.73597]	[0.05627]	[0.66813]	[0.32642]	[-2.93012]	[-3.85567]	[-0.26162]	[0.74868]	[0.18817]	[-2.65056]
R-squared	0.883597	0.783265	0.684457	0.672356	0.947308	0.879157	0.789775	0.692737	0.679265	0.946893
Adj. R-squared	0.682537	0.408904	0.139429	0.106426	0.856294	0.670428	0.426658	0.162010	0.125268	0.855162
Sum sq. resids	0.660052	3.184955	1.907359	6.784981	3.265534	52.79691	3.089291	1.857310	6.641908	3.291251
S.E. equation	0.244959	0.538090	0.416409	0.785377	0.544855	2.190826	0.529948	0.410909	0.777052	0.546996
F-statistic	4.394694	2.092271	1.255819	1.188055	10.40839	4.211960	2.174988	1.305260	1.226118	10.32253
Log likelihood	15.67898	-8,716082	-0,768946	-20,43832	-9,103353	-52,24031	-8,24339	-0,356798	-20,10798	-9,224941
Akaike AIC	0.278775	1.852650	1.339932	2.608924	1.877636	4.660665	1.822154	1.313342	2.587612	1.885480
Schwarz SC	1.203928	2.777804	2.265085	3.534077	2.802789	5.585818	2.747307	2.238495	3.512765	2.810633
Mean dependent	-0,030005	0.032318	-0,059148	-0,17093	0.312396	-0,153002	0.032318	-0,059148	-0,17093	0.312396
S.D. dependent	0.434756	0.699884	0.448876	0.830831	1.437286	3.816216	0.699884	0.448876	0.830831	1.437286

Source: Individual calculations based on the time series data for the banking

sector, published by National Bank of Macedonia.

Table 4 Results of regression analysis of the independent variables impact on ROAA and ROAE

(*Iteration with DUMMY VARIABLE FOR 2009*) – Full model

Dependent Variable: D(ROAA)	Dependent Variable: D(ROAE)
Method: Least Squares	Method: Least Squares
Date: 02/28/15 Time: 00:34	Date: 02/28/15 Time: 01:13
Sample (adjusted): 2007Q1 2014Q3	Sample (adjusted): 2007Q1 2014Q3
Included observations: 31 after adjustments	Included observations: 31 after adjustments
D(ROAA) = C(1)*(ROAA(-1) - 2.25417377113*PC_NIC(-1) +	D(ROAE) = C(1)*(ROAE(-1) - 23.4884680174*PC_NIC(-1) +
1.19835485969*HLA_TA(-1) + 53.572318473) + C(2)*(NPL_GL(-1) -	4.31327645547*HLA_TA(-1) + 746.349372669) + C(2)*(NPL_GL(-1) -
10.0554793905*PC_NIC(-1) + 1.96499249886*HLA_TA(-1) +	10.0066803519*PC_NIC(-1) - 0.0967367563947*HLA_TA(-1) +
309.933578208) + C(3)*(CAR(-1) - 28.8139270934*PC_NIC(-1) +	355.199022574) + C(3)*(CAR(-1) - 34.7666303019*PC_NIC(-1) +
8.97351530924*HLA_TA(-1) + 822.797771592) + C(4)*D(ROAA(-1)) +	2.57336909196*HLA_TA(-1) + 1184.5504817) + C(4)*D(ROAE(-1)) +
C(5)*D(ROAA(-2)) + C(6)*D(ROAA(-3)) + C(7)*D(NPL_GL(-1)) + C(8)	C(5)*D(ROAE(-2)) + C(6)*D(ROAE(-3)) + C(7)*D(NPL_GL(-1)) + C(8)
*D(NPL_GL(-2)) + C(9)*D(NPL_GL(-3)) + C(10)*D(CAR(-1)) + C(11)	*D(NPL_GL(-2)) + C(9)*D(NPL_GL(-3)) + C(10)*D(CAR(-1)) + C(11)
*D(CAR(-2)) + C(12)*D(CAR(-3)) + C(13)*D(PC_NIC(-1)) + C(14)	*D(CAR(-2)) + C(12)*D(CAR(-3)) + C(13)*D(PC_NIC(-1)) + C(14)
*D(PC_NIC(-2)) + C(15)*D(PC_NIC(-3)) + C(16)*D(HLA_TA(-1)) +	*D(PC_NIC(-2)) + C(15)*D(PC_NIC(-3)) + C(16)*D(HLA_TA(-1)) +
C(17)*D(HLA_TA(-2)) + C(18)*D(HLA_TA(-3)) + C(19) + C(20)*DUMMY	C(17)*D(HLA_TA(-2)) + C(18)*D(HLA_TA(-3)) + C(19) + C(20)*DUMMY

	Coefficient	Std. Error	t-Statistic	Prob.		Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0,785658	0,197117	3,985751	0,0021	C(1)	1,126221	0,298098	3,778027	0,0031
C(2)	0,560105	0,205362	2,727402	0,0197	C(2)	5,421777	1,957228	2,77013	0,0182
C(3)	-0,244099	0,078033	-3,128143	0,0096	C(3)	-2,221432	0,687638	-3,230526	0,008
C(4)	-1,595177	0,356736	-4,471585	0,0009	C(4)	-1,778899	0,427332	-4,162801	0,0016
C(5)	-1,710795	0,389199	-4,395684	0,0011	C(5)	-1,831775	0,451672	-4,055539	0,0019
C(6)	-1,175201	0,27759	-4,233585	0,0014	C(6)	-1,358849	0,315881	-4,301772	0,0013
C(7)	-0,431343	0,258239	-1,670324	0,123	C(7)	-4,538147	2,354104	-1,92776	0,0801
C(8)	0,082619	0,148481	0,556428	0,5891	C(8)	-0,344815	1,303569	-0,264516	0,7963
C(9)	-0,060822	0,162872	-0,373437	0,7159	C(9)	-1,138271	1,463038	-0,778019	0,453
C(10)	0,143967	0,207853	0,69264	0,5029	C(10)	1,838646	1,857113	0,990056	0,3434
C(11)	-0,347097	0,255173	-1,36024	0,201	C(11)	-1,946322	2,378986	-0,818131	0,4306

C(12)	0,168934	0,238661	0,707841	0,4938	C(12)	2,090149	2,186447	0,955957	0,3596
C(13)	0,140521	0,177878	0,789985	0,4462	C(13)	1,546604	1,581508	0,97793	0,3491
C(14)	-0,044647	0,108158	-0,412793	0,6877	C(14)	0,0074	0,974424	0,007594	0,9941
C(15)	0,160077	0,089678	1,785006	0,1018	C(15)	1,399763	0,787409	1,777682	0,1031
C(16)	0,049661	0,053229	0,932975	0,3709	C(16)	0,874031	0,520067	1,680614	0,121
C(17)	0,123406	0,060271	2,047531	0,0653	C(17)	1,316201	0,529496	2,485761	0,0303
C(18)	-0,050709	0,062003	-0,817856	0,4308	C(18)	-0,374959	0,557167	-0,672975	0,5149
C(19)	0,010939	0,100968	0,108338	0,9157	C(19)	0,721288	0,859037	0,839648	0,419
C(20)	-1,352871	0,36212	-3,735972	0,0033	C(20)	-12,74848	3,306425	-3,85567	0,0027

Source: Individual calculations based on the time series data for the banking sector, published by National Bank of Macedonia.

Table 5 Results of regression analysis of the independent variables impact on ROAA and ROAE

(*Iteration with DUMMY VARIABLE FOR 2009*) – Reduced model

Dependent Variable: D(ROAA)	Dependent Variable: D(ROAE)
Method: Least Squares	Method: Least Squares
Date: 02/28/15 Time: 00:41	Date: 02/28/15 Time: 01:17
Sample (adjusted): 2007Q1 2014Q3	Sample (adjusted): 2007Q1 2014Q3
Included observations: 31 after adjustments	Included observations: 31 after adjustments
D(ROAA) = C(1)*(ROAA(-1) - 2.25417377113*PC_NIC(-1) +	D(ROAE) = C(1)*(ROAE(-1) - 23.4884680174*PC_NIC(-1) +
1.19835485969*HLA_TA(-1) + 53.572318473) + C(2)*(NPL_GL(-1) -	4.31327645547*HLA_TA(-1) + 746.349372669) + C(2)*(NPL_GL(-1) -
10.0554793905*PC_NIC(-1) + 1.96499249886*HLA_TA(-1) +	10.0066803519*PC_NIC(-1) - 0.0967367563947*HLA_TA(-1) +
309.933578208) + C(3)*(CAR(-1) - 28.8139270934*PC_NIC(-1) +	355.199022574) + C(3)*(CAR(-1) - 34.7666303019*PC_NIC(-1) +
8.97351530924*HLA_TA(-1) + 822.797771592) + C(4)*D(ROAA(-1)) +	2.57336909196*HLA_TA(-1) + 1184.5504817) + C(4)*D(ROAE(-1)) +
C(5)*D(ROAA(-2)) + C(6)*D(ROAA(-3)) + C(17)*D(HLA_TA(-2)) + C(20)	C(5)*D(ROAE(-2)) + C(6)*D(ROAE(-3)) + C(7)*D(NPL_GL(-1)) + C(17)
*DUMMY	*D(HLA_TA(-2)) + C(20)*DUMMY

	Coefficient	Std. Error	t-Statistic	Prob.		Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0,476402	0,146399	3,25413	0,0035	C(1)	0,642555	0,211051	3,044557	0,0059
C(2)	0,291226	0,091396	3,186418	0,0041	C(2)	2,543914	0,91022	2,794834	0,0106
C(3)	-0,133536	0,040494	-3,297634	0,0031	C(3)	-1,12934	0,376133	-3,002503	0,0066
C(4)	-1,074567	0,213368	-5,036203	0,0000	C(4)	-1,189214	0,266903	-4,455607	0,0002
C(5)	-0,983559	0,196906	-4,995073	0,0000	C(5)	-1,13747	0,249672	-4,555853	0,0002

C(6)	-0,778844	0,14583	-5,340754	0,0000	C(6)	-1,022787	0,204899	-4,991658	0,0001
C(17)	0,029566	0,039106	0,756037	0,4573	C(7)	-1,258849	1,089428	-1,155514	0,2603
C(20)	-1,025557	0,226748	-4,522897	0,0002	C(17)	0,545567	0,342824	1,591392	0,1258
					C(20)	-8,98367	1,99015	-4,514066	0,0002

R-squared	0,692455	Mean dependent var	-0,030005	R-squared	0,700907	Mean dependent var	-0,153002
Adjusted R-squared	0,598854	S.D. dependent var	0,434756	Adjusted R-squared	0,592147	S.D. dependent var	3,816216
S.E. of regression	0,275358	Akaike info criterion	0,476145	S.E. of regression	2,437165	Akaike info criterion	4,857249
Sum squared esid	1,743904	Schwarz criterion	0,846206	Sum squared resid	130,6751	Schwarz criterion	5,273568
Log likelihood	0,619752	Hannan-Quinn criter.	0,596776	Log likelihood	-66,28736	Hannan-Quinn criter.	4,992958
Durbin-Watson stat	2,299933			Durbin-Watson stat	2,21343		

Source: Individual calculations based on the time series data for the banking sector, published by National Bank of Macedonia.

Results indicate that there's a slight difference between the statistically significant independent variables for ROAA and ROAE. Through the 2009 regression model results could be concluded that DUMMY variable is statistically significant determinant of ROAA and ROAE as well. The statistical relevance of the model could be observed via results presented into Appendix 1-3. The serial correlation, ARCH effect and structural shocks did not present a problem from statistical point of view for the first model iteration (with DUMMY variable value of 1 for 2009). These conclusions are relevant for ROAA and ROAE as dependent variables as well.

Analyzing the obtained results from the model using the same statistical procedures for 2010 and 2011 iteration, we found that DUMMY variable effect on ROAA and ROAE were statistically insignificant or model was inconsistent with statistically acceptable parameters. The data for 2010 presented in Appendix 4, were analyzed through the full regression model, while the analyzes for 2011 (presented in Appendix 5), through reduced form model (model based only on statistically significant coefficients from the 2011 full model). The individual statistical significance of any of the coefficients (from C1 to C20) cannot be obtained from the results presented in Appendix 4. The results regarding this individual insignificance are the same for ROAA and ROAE. Adjusted R-squared for both dependent variables is around 20% (22,6% for ROAA and 19,4% for ROAE) which

lead us to conclusion that independent variables collectively explain a very small portion of the movement of profitability indicators. The results presented in Appendix 5, lead us to conclusion that DUMMY variables coefficients are individually insignificant on ROAA and ROAE as well. Namely, the movement of dependent variable ROAA was only explained by 13,93%, while the movement of ROAE with 14,34%.

Empirical results from the model (with DUMMY variable value for 2009), confirmed our hypothesis for the impact of financial crisis on bank profitability in the RM. Through the LS method results for DUMMY variable presented in Table 4 (full model) and 5 (Reduced model), it could be concluded that ROAA and ROAE are impacted by the financial crisis in 2009 and that this influence is negative.

Statistical relevance of the model was analyzed through the following tests:

1. Breusch-Godfrey Serial Correlation LM Test (Appendix 1) – results lead us to conclusion that there is no presence of serial correlation into the model;

2. Autoregressive conditional heteroskedasticity test - ARCH (presented in Appendix 2) – via the obtained results we did not detect an ARCH effect presence in the model ;

3. Cumulative sum control chart test - CUSUM (presented in Appendix 3)-results illustrate that statistical data doesn't have a structural problems e.g. there are not deviations from defined limits.

In general, the models are in line with the accepted criteria from statistical perspective. The analyzed model should not be used on stand-alone basic, but in combination of other banking models, customized regarding the specific characteristics of each individual financial institution and tested through relevant procedures.

Conclusions and Recommendations

The paper provide general analyzes regarding the profitability indicators of Serbian and Bosnian banks during the period of crisis. However the focus on the empirical analysis is banking sector of the Republic of Macedonia due to the modest time series statistical data used for activities of this type. Macedonian banking sector is generally functioning on traditional

principles without significant share of complex products and services. Analyze the key profitability indicators ROA and ROAE indicate that the banking sector in the Republic of Macedonia successfully overcome the crisis difficulties generated by the recent financial crisis.

The model for the banking profitability and efficiency in Republic of Macedonia presented in the paper primarily consider the effects of global financial crisis on profitability indicators. The model could be used for better management decisions and further projections of the profitability indicators dependencies regarding the negative influences in the periods of abnormal movements in the market. The paper employ the following statistically independent variables: Non-performing loans/Gross loans (NPL/GL), Capital adequacy ratio (CAR), Personnel costs/Non-interest costs (PC/NIC) and Highly liquid assets/Total assets (HLA/TA), as well as a dummy variable. As a result of Johansen co integration test guidelines, we use VECM model. Subsequently, the full and reduced regression models with OLS method were generated and the dummy variable statistical influence determined. The main conclusions were obtained from reduced form model. The dummy variable was introduced into three separate iterations for the period 2009-2011 for ROAA and ROAE as well.

Final results indicate the following connections: 1) Non-performing loans/Gross loans has opposite direction from ROAA and ROAE, ie. in line with our initial expectations; 2) Capital adequacy ratio is in the same direction with profitability indicators which to some extent is contrary to our initial expectations; 3) Personnel costs/Non-interest costs moves into the same direction with the dependent variables (ROAA and ROAE) e.g. according to our initial expectations; 4) Highly liquid assets/Total assets moves into the same direction with the dependent variables e.g. according to our initial expectations.

The financial crisis according to our starting hypotheses, hits the Macedonian banking sector with time lag, so as a reference year for dummy variable statistical tests impact was allocated the period 2009 - 2011. The results to some extent confirmed our starting expectations that 2009 was the year when Macedonian banking sector was influenced by the global financial crisis. The model did not reflect the expected statistical significance of the dummy variable for 2010 and 2011 for ROAA and ROAE, which was contrary to our initial expectations.

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Appendix 1 Segment *of the results from Breusch-Godfrey Serial Correlation LM Test*

Dependent Variable: ROAA

F-statistic	1,269707	Prob. F(2,21)	0,3016
Obs*R-squared	3,342579	Prob. Chi-Square(2)	0,188

Dependent Variable: ROAE

F-statistic	0,517621	Prob. F(2,20)	0,6037
Obs*R-squared	1,219813	Prob. Chi-Square(2)	0,5434

Appendix 2 Segment *of the results from Heteroskedasticity Test: ARCH*

Dependent Variable: ROAA

F-statistic	0,013477	Prob. F(1,28)	0,9084
Obs*R-squared	0,014433	Prob. Chi-Square(1)	0,9044

Dependent Variable: ROAE

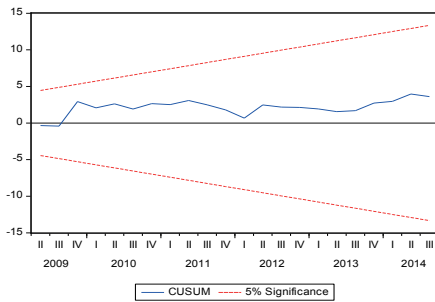|			
F-statistic	0,483932	Prob. F(1,28)	0,4924
Obs*R-squared	0,50969	Prob. Chi-Square(1)	0,4753

Appendix 3 Results from *CUSUM TEST*

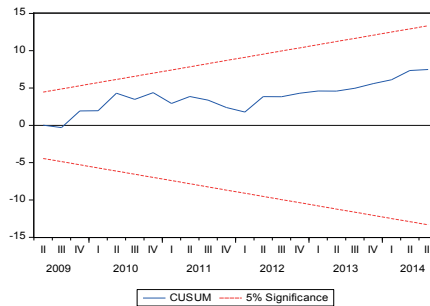Diagram 1 Dependent Variable ROAA   Diagram 2 Dependent Variable ROAE

Appendix 4 Results of regression analysis of the independent variables impact on ROAA and ROAE (*Iteration with DUMMY VARIABLE FOR 2010*) – Full model

Dependent Variable: D(ROAA)	Dependent Variable: D(ROAE)
Method: Least Squares	Method: Least Squares
Date: 02/28/15 Time: 11:51	Date: 02/28/15 Time: 11:35
Sample (adjusted): 2007Q1 2014Q3	Sample (adjusted): 2007Q1 2014Q3
Included observations: 31 after adjustments	Included observations: 31 after adjustments

D(ROAA) = C(1)*(ROAA(-1) + 0.0687446306835*PC_NIC(-1) + 0.222445836363*HLA_TA(-1) - 8.35495224299) + C(2)*(NPL_GL(-1) - 1.557002059*PC_NIC(-1) - 0.742806806654*HLA_TA(-1) + 63.6921346276) + C(3)*(CAR(-1) - 0.670196923345*PC_NIC(-1) + 0.408206333747*HLA_TA(-1) - 1.82878074049) + C(4)*D(ROAA(-1)) + C(5)*D(ROAA(-2)) + C(6)*D(ROAA(-3)) + C(7)*D(NPL_GL(-1)) + C(8) *D(NPL_GL(-2)) + C(9)*D(NPL_GL(-3)) + C(10)*D(CAR(-1)) + C(11) *D(CAR(-2)) + C(12)*D(CAR(-3)) + C(13)*D(PC_NIC(-1)) + C(14) *D(PC_NIC(-2)) + C(15)*D(PC_NIC(-3)) + C(16)*D(HLA_TA(-1)) + C(17)*D(HLA_TA(-2)) + C(18)*D(HLA_TA(-3)) + C(19) + C(20)*DUMMY

D(ROAE) = C(1)*(ROAE(-1) + 0.913616754846*PC_NIC(-1) + 1.47534638179*HLA_TA(-1) - 73.3252857249) + C(2)*(NPL_GL(-1) - 1.57349939889*PC_NIC(-1) - 0.767823211346*HLA_TA(-1) + 64.8607529863) + C(3)*(CAR(-1) - 1.00834361864*PC_NIC(-1) + 0.248001694314*HLA_TA(-1) + 14.0815656742) + C(4)*D(ROAE(-1)) + C(5)*D(ROAE(-2)) + C(6)*D(ROAE(-3)) + C(7)*D(NPL_GL(-1)) + C(8) *D(NPL_GL(-2)) + C(9)*D(NPL_GL(-3)) + C(10)*D(CAR(-1)) + C(11) *D(CAR(-2)) + C(12)*D(CAR(-3)) + C(13)*D(PC_NIC(-1)) + C(14) *D(PC_NIC(-2)) + C(15)*D(PC_NIC(-3)) + C(16)*D(HLA_TA(-1)) + C(17)*D(HLA_TA(-2)) + C(18)*D(HLA_TA(-3)) + C(19) + C(20)*DUMMY

	Coefficient	Std. Error	t-Statistic	Prob.		Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0,037355	0,470342	-0,079421	0,9381	C(1)	0,085819	0,5153	0,166543	0,8708
C(2)	-0,117923	0,238828	-0,493759	0,6312	C(2)	-1,056057	2,04996	-0,51516	0,6166
C(3)	0,102601	0,077421	1,325231	0,212	C(3)	0,698466	0,4927	1,417623	0,184

C(4)	-0,48635	0,500648	-0,97144	0,3522	C(4)	-0,471662	0,52665	-0,89559	0,3897
C(5)	-0,610314	0,500239	-1,220045	0,248	C(5)	-0,541438	0,53189	-1,01795	0,3306
C(6)	-0,589132	0,431926	-1,363967	0,1998	C(6)	-0,666725	0,46383	-1,43742	0,1784
C(7)	0,05699	0,406225	0,140293	0,891	C(7)	0,241472	3,57325	0,067578	0,9473
C(8)	-0,049921	0,24006	-0,207951	0,8391	C(8)	-1,350347	2,17357	-0,62126	0,5471
C(9)	-0,271936	0,247721	-1,097751	0,2958	C(9)	-2,965176	2,24754	-1,3193	0,2139
C(10)	-0,206182	0,349088	-0,59063	0,5667	C(10)	-0,927634	3,1357	-0,29583	0,7729
C(11)	-0,176623	0,4255	-0,415095	0,6861	C(11)	-0,043261	3,91543	-0,01105	0,9914
C(12)	0,368549	0,392711	0,938472	0,3682	C(12)	3,926829	3,57484	1,098462	0,2955
C(13)	-0,078424	0,29029	-0,270158	0,792	C(13)	-0,43244	2,57357	-0,16803	0,8696
C(14)	-0,066734	0,185799	-0,359174	0,7263	C(14)	-0,094391	1,67599	-0,05632	0,9561
C(15)	0,114216	0,148297	0,77018	0,4574	C(15)	1,033496	1,29238	0,799682	0,4408
C(16)	0,005501	0,089144	0,061709	0,9519	C(16)	0,2917	0,82254	0,354635	0,7296
C(17)	0,139883	0,094698	1,477145	0,1677	C(17)	1,291855	0,82727	1,56159	0,1467
C(18)	-0,102733	0,094681	-1,085041	0,3011	C(18)	-0,874078	0,84999	-1,02834	0,3259
C(19)	-0,131202	0,154295	-0,850336	0,4133	C(19)	-0,65307	1,32661	-0,49228	0,6322
C(20)	0,089432	0,434792	0,205688	0,8408	C(20)	1,033583	3,889	0,265771	0,7953

R-squared	0,716241	Mean dependent var		-0,03001	R-squared	0,704785	Mean dependent var		-0,153
Adjusted R-squared	0,226112	S.D. dependent var		0,434756	Adjusted R-squared	0,194867	S.D. dependent var		3,816216
S.E. of regression	0,382459	Akaike info criterion		1,169841	S.E. of regression	3,42426	Akaike info criterion		5,553879
Sum squared resid	1,609026	Schwarz criterion		2,094995	Sum squared resid	128,9811	Schwarz criterion		6,479032
Log likelihood	1,867457	Hannan-Quinn criter.		1,471418	Log likelihood	-66,08512	Hannan-Quinn criter.		5,855455
F-statistic	1,46133	Durbin-Watson stat		2,056052	F-statistic	1,382154	Durbin-Watson stat		2,049225
Prob(F-statistic)	0,262834				Prob(F-statistic)	0,295912			

Source: Individual calculations based on the time series data for the banking sector, published by National Bank of Macedonia. http://www.nbrm.mk/?ItemID=3094889810EE20458F9308EAEB1ABC83.

Appendix 5 Results of regression analysis of the independent variables impact on ROAA and ROAE

(*Iteration with DUMMY VARIABLE FOR 2011*) – Reduced model

Dependent Variable: D(ROAA)	Dependent Variable: D(ROAE)
Method: Least Squares	Method: Least Squares
Date: 02/28/15 Time: 13:19	Date: 02/28/15 Time: 12:44
Sample (adjusted): 2006Q2 2014Q3	Sample (adjusted): 2006Q2 2014Q3

Included observations: 34 after adjustments	Included observations: 34 after adjustments
D(ROAA) = C(1)*(ROAA(-1) - 0.212529265192*PC_NIC(-1) +	D(ROAE) = C(1)*(ROAE(-1) - 2.59630394407*PC_NIC(-1) +
0.74762265799*HLA_TA(-1) - 10.141434426) + C(2)*(NPL_GL(-1) -	4.20278856455*HLA_TA(-1) - 8.33454391983) + C(2)*(NPL_GL(-1) -
1.60769185364*PC_NIC(-1) - 0.411868836483*HLA_TA(-1) +	1.60475091188*PC_NIC(-1) - 0.698961957743*HLA_TA(-1) +
57.9796429123) + C(3)*(CAR(-1) - 1.03889515311*PC_NIC(-1) +	64.4224890375) + C(3)*(CAR(-1) - 1.89582094518*PC_NIC(-1) +
1.95920445165*HLA_TA(-1) - 23.8486941083) + C(20)*DUMMY	1.54809889828*HLA_TA(-1) + 16.5877912979) + C(20)*DUMMY

	Coefficient	Std. Error	t-Statistic	Prob.		Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0,423656	0,157031	-2,697914	0,0113	C(1)	-0,460432	0,164275	-2,802806	0,0088
C(2)	-0,100295	0,064484	-1,555354	0,1303	C(2)	-0,984769	0,539432	-1,825566	0,0779
C(3)	0,152863	0,057338	2,665989	0,0122	C(3)	0,97638	0,346808	2,815333	0,0085
C(20)	-0,244201	0,210413	-1,16058	0,255	C(20)	-2,202541	1,800289	-1,223438	0,2307

R-squared	0,217633	Mean dependent var	-0,030875	R-squared	0,221281	Mean dependent var	-0,138851
Adjusted R-squared	0,139396	S.D. dependent var	0,44081	Adjusted R-squared	0,143409	S.D. dependent var	3,760113
S.E. of regression	0,408934	Akaike info criterion	1,159606	S.E. of regression	3,480068	Akaike info criterion	5,442112
Sum squared resid	5,016816	Schwarz criterion	1,339178	Sum squared resid	363,3262	Schwarz criterion	5,621684
Log likelihood	-15,7133	Hannan-Quinn criter.	1,220845	Log likelihood	-88,5159	Hannan-Quinn criter.	5,503351
Durbin-Watson stat	2,281029			Durbin-Watson stat	2,244805		

Source: Individual calculations based on the time series data for the banking sector, published by National Bank of Macedonia. http://www.nbrm. mk/?ItemID=3094889810EE20458F9308EAEB1ABC83.

ISKRA STANCHEVA-GIGOV[1]

FOREIGN DIRECT INVESTMENT AND ECONOMIC GROWTH: EMPIRICAL ANALYSIS

Abstract

Investments represent a factor of economic growth and development, regardless of their internal or external origin. Foreign Direct Investments (FDI) represent a constituent of the total investments, meaning that they have a certain impact on economic growth. The existence of a positive correlation between the level of incoming foreign direct investment and economic growth in the economy is evident in numerous studies that explore this subject, but also there are the opposing views. That implies the need for further research to assess the relationship between these two categories. Therefore main objective of this paper is to estimate and show the impact of FDI on economic growth.

This paper presents an empirical model (panel model with random effects) which analyzes the 84 countries in the forty-year period. The results suggest that there is statistically significant relationship between FDI inflows and economic growth rates, in conjunction with human capital, the trade openness and government consumption. The obtained findings suggest a lot of ideas for future research.

Key words: foreign direct investment, economic growth, panel regression analysis, trade openness, human capital, technology

JEL classification: F21, F30, F43, C01, C33

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Introduction

The modern economy has characterized the process of globalization, which abolishes barriers in international trade, intensify relations between individuals, organizations and institutions globally. This enables greater volume and quickness of transfer of goods from one place to another and greater movement of capital. In such circumstances no longer question whether to open the doors of the national economy for foreign investment, but which measures and strategies to be taken to attract foreign investors, and certainly with that to boost economic growth.

The role and importance of Foreign Direct Investments in the national economy is primarily visible in key macroeconomic moments, as explained by Todaro and Smith. They represent one of the most favorable forms of engaging foreign private savings in the financing of economic development, and reducing the gap between planned investment and local savings. Secondly, there is a significant contribution of FDI in overcoming the foreign trade gap of the country in which the investment is made. Thus, foreign investments effectively cover the discrepancy between the planned public revenue and tax collected, as well as other forms of revenue meant for public consumption. There are great benefits from Foreign Direct Investments through the transfer of managerial and entrepreneurial experience. Finally, today they represent a major channel for the transfer of modern technology between countries.[2]

Theoretical literature points out that FDI making a potentially large impact on the economic growth of the host country through various channels: the impact on the quality and quantity of capital formation, technology transfer, increase the level of development of human capital, expanding trade opportunities. But in practice still the question whether FDI stimulate economic growth and how to achieve it?

The theoretical and empirical literature suggest divided opinions and conclusions on the impact of FDI on economic growth. Because of that in order to make a more detailed examination of the flow of FDI and economic growth and their potential link to a certain group of countries, in this paper was developed certain empirical model.

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[2] Popović, G., Savić M., *EU Economy, Macroeconomic Aspects and Common Policies*. Ekonomski fakultet u Banjoj Luci, 2009, p. 8-9

1. REVIEW OF EMPIRICAL RESEARCH ON THE EFFECT OF FDI ON ECONOMIC GROWTH

As mentioned above, in the empirical literature is divided opinion about the contribution of FDI to economic growth. Some authors have argued that FDI has encouraged growth in economies, while others determined that there is no positive effect of FDI on the rate of economic growth. Those who support the view that FDI has a positive impact on economic growth consider that there are different channels that produce positive externalities associated with FDI, such as: a) channel of competition, where increased competition will lead to increased productivity, efficiency and investment in human and/or physical capital. Increased competition can lead to changes in the industrial structure through more competitive and more export-oriented activities; b) channel of training, which increased workforce's training and management; c) channel of connection, where foreign investments are often accompanied by technology transfer, and d) channel through which domestic firms imitate advanced technologies used by foreign firms.

In this context, Borensztein, De Gregorio and Lee (1998)[3] found that FDI has a positive effect on economic growth, but the degree of the relationship depends on the quality of the human capital of the host country. To be able to produce higher quality products, the workforce must be skilled at using the new technologies, and then will be greater effects of FDI on economic growth. Shen (2010)[4] research confirms the conclusion of previous authors that FDI evidently has a significantly positive effect on growth when human capital is considered. Jyun-Yi, Wu and Hsu Chin-Chiang (2008) found that FDI have a positive and significant impact on growth when host countries have a better level of initial GDP and human capital. Bengoa and Sanchez-Robles (2003)[5] also conclude that FDI has a significant positive effect on host country economic growth, but similar to Borensztein, De Gregorio and Lee the magnitude depends on host country conditions.

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[3] Borensztein, E; De Gregorio,J; Lee,J.W, How does foreign direct investment affect economic growht?, Journal of International Economics , 45, 1998, p. 115-135
[4] Shen, C.H, Lee, C.C, & Lee, C.C., What Makes International Capital Flows Promote Economic Growth? An International Cross-Country Analysis. *Scottish journal of political economy,* 57(5), 2010, p.515-546.
[5] Bengoa, M.; Sanchez-Robles,B, Foreign direct investment, economy freedom and growth: new evidence from Latin America, European Journal of Political Economy, 19, 2003, p. 529-545.

Another research made by Olofsodotter (1998)[6] found that the FDI stock has a positive effect on the economic growth rate, due to technology spillovers. In addition, the effect is stronger for host countries with a higher level of institutional capability as measured by the degree of property rights protection and bureaucratic efficiency in the host country.

Many authors, including Alfaro and Charlton (2006)[7], also found that FDI has no direct impact on economic growth, but the impact is more significant when taking into account the variables of financial development. According to these authors, the successful functioning of financial markets is a precondition for foreign direct investment could stimulate growth in that economy.

Basu, Chakraborty and Reagle (2003)[8] found a co-integrated relationship between FDI and GDP growth. Trade openness was emphasized as a crucial determinant of the impact of FDI on growth. Trevino and Upadhyaya (2003)[9] find a similar result, that the positive impact of FDI on economic growth is greater in more open economies.

In addition, De Mello (1999)[10] estimates the impact of FDI on capital accumulation and output growth in the recipient economy. In contrast to previous studies, he found that FDI can lead to better technology and enhanced management in the host country; but the evidence was relatively weak on whether FDI essentially creates economic growth. Carkovic and Levine (2002) also found that there is no strong link running from inward FDI to host country economic growth.

But as we said there are also authors who confirm that the correlation between FDI and economic growth is negative. One of them is Joze Mencinger.[11] He explained its conclusions by the fact that in the surveyed countries in transition, the dominant form of foreign direct investment was the acquisition. Moreover, he points out that the acquisition can't be considered as investing

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[6] Olofsdotter, K., Foreign direct investment, country capabilities and economic growth, Weltwirtschaftliches Archiv, 134 (3), 1998, p. 534-547.

[7] Laura Alfaro, Andrew Charlton, Growth and the Quality of Foreing Direct Investment: Is All FDI Equal", Working Paper, 2006, http://dor.hbs.edu/fit/fi

[8] Basu, P.; Chakraborty, C.; and Reagle, D., Liberalization, FDI and Growth in Developing Countries: A Panel Cointegration Approach. Economic Inquiry, 41 (3), 2003, p. 510-516.

[9] Trevino, Len. J. and Upadhyaya, K. P., Foreing aid, FDI and Economic growth: Evidence from Asian countries. Transnational Corporations, 16 (4), 2003, p. 119-135.

[10] De Mello, L., Foreign Direct Investment-led growth: evidence from time series and panal data, Oxford Economic Papers, 51, 1999, p. 133-151.

[11] Mencinger, J., "Does Foreing Investment Always Enhance Economic Growth?", Kyklos, International Review for Social Sciences, vol 56-2003-no4., 2003, p. 491-508

in real assets because the proceeds from the sale can be used for consumption or investment, and thus FDI can not affect economic growth. Also, Nuzhat Falki (2009) examined the impact of FDI on economic growth of Pakistan and concluded that FDI has negative statically insignificant relationship between GDP and FDI inflows. His econometric evidence also indicates that the growth effect of FDI is positive and significant in the group of developed countries, and positive, though insignificant in the developing ones.[12]

When analyzing all these studies, it can be clearly concluded that foreign direct investment in themselves do not necessarily have a positive impact on economic growth, but it is connected with the impact of a number of other variables such as: financial development i.e. development of the financial markets, the level of human capital, the quality of the bureaucracy and the like.

Debate is still going on about the magnitude of the impact of FDI on economic growth. Such results and divided views on the impact and contributions to FDI for economic growth is one of the reasons which prompted implementation of the research shown below in the paper.

2. REGRESSION ANALYSIS OF THE IMPACT OF FOREIGN DIRECT INVESTMENT ON ECONOMIC GROWTH

2.1. Variables used in the model

Following Barro's pivotal research (1996), a significant number of variables in strong correlation with the economic growth rate have been identified in the modern empirical literature on this subject.

The basic approach comprises evaluation of panel regressions in the following form:

$$\gamma i, t = \alpha + \text{ß1*X1} + \text{ß2*X2} + ... + \text{ßn*Xn} + \varepsilon i, t \qquad (1)$$

where γ is the vector of the real economic growth rates and X1, ..., Xn are vectors of the predictor (independent) variables, which are used differently by different researchers and research papers, ßi marks the inclination of the vector coefficients of the explanatory variables and $\varepsilon i, t$ is a random error.

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[12] Dimelis, S. P., & Papaioannou, S. K., FDI and ICT Effects on Productivity Growth: A Comparative Analysis of Developing and Developed Countries. *European Journal of Development Research*, 22(1), 2010, p. 79-96.

For instance, Sala-I-Martin, Doppelhofer and Miller (2000) conclude that the following variables are in very strong correlation with the economic growth: initial level of GDP per capita, investment rate (gross investments expressed as a percentage of GDP), a number of measures for the scope and quality of the population's education, certain political indicators etc.[13]

Taking into consideration the theoretical body of knowledge and the most frequently cited independent variables when analyzing foreign direct investment influence on the economic growth in the empirical literature (that were previously discussed), for the purposes of the econometric calculations in this paper are selected six variables:

- ❖ Initial GDP per capita
- ❖ The number of years spent in education by the population of over 25 years of age
- ❖ Natural population growth
- ❖ The inflow of foreign direct investment
- ❖ The level of trade openness
- ❖ The level of public expenditure

The initial level of GDP per capita (gdppc) tests the hypothesis for the (conditional) Beta (β) convergence. Beta-convergence directs to the fact that due to decreasing capital inflow, economies grow faster when they are far below their steady state. In the neoclassical model of growth the growth rate of GDP per capita is in inverse proportion to the initial level of income.[14] Considering the theoretical pointers and the strong empirical findings, this variable's expected coefficient value is negative.

Education levels of the population of over 25 years of age (edu), presented with the average number of years spent in education by that population, is a variable which determines the human capital of a country. It is far from being a perfect measure of a country's human capital. Namely, the indicator reveals changes neither in the quality of education nor in the capacity of the educational system. Notwithstanding, the value is forecast to

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[13]Stancheva-Gigov, I., The impact of foreign trade on economic growth, Journal of Sustainable Development (1857-8519), Vol. 5 Issue 11, December, 2014, p.56

[14] Baddeley, M., Convergence or divergence? The impact of globalization on growth and inequality in less-developed countries, International Review of Applied Economics, 20 (3), 2006 and Dawson, J. W. and Sen, A. New evidence on the convergence of international income from a group of 29 countries, Empirical Economics, 33, 2007

be positive, since human capital development and reinforcement is expected to produce effects that will bring about a more rapid economic growth.[15]

The relationship between *population growth (popgr)* and economic growth continues to stir up controversy among the economists who address questions related to economic growth and development. Those with a pessimist view on population growth claim that the latter impedes development, inasmuch as a larger population requires additional capital output per worker and entails considerable public expenditures for the upkeep of future generations. On the other hand, those with the optimistic viewpoint on population growth assume that it improves long-term productivity by engendering new ideas, as well as by learning and doing practical work, made possible by the heightened production volume. Because of the different attitudes of the theorists, it is anticipated that the coefficient value of this variable could go in both directions (+/-).[16]

Foreign direct investment (invy) serve as both a direct capital financing method and as a way to bring about positive externalities. FDI is a medium of technology transfer, which contributes towards long-term growth, with high probability, much more so than domestic investments. Technology diffusion is possible through import of high-tech products, as well as acquiring human capital. FDI includes financial, technological, managerial and intellectual capital, which all together comprise the resources for production of goods and services. In fact, FDI is considered to be an additional channel enabling domestic economies accelerated growth.

FDI per capita, FDI as a percentage of GDP, FDI inflows and FDI net inflows are frequently used as indicators of the foreign capital inflow in a country. In this paper, we have employed the FDI-as-a-percentage-of-GDP indicator. The sign of this relationship could be ambivalent (+/-). Namely, opinions on FDI's contribution to economic growth are divided in the empirical literature. Some authors (Bloomstrom (1994), Khawar (2005), Alfaro (2007), Dimelis and Papaioannou (2010)) maintain that FDI encourages economic growth, while others (Tsai (1994), Carkovic and Levine (2002), Mencinger (2003), Durham (2004)) assert that there is no positive effect of FDI on the economic growth rate.

Trade openness (to) refer to the degree to which countries engage in trade with other countries or economies. Trade openness is one of the major

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[15] Stojkov Aleksandar, Current Account Deficit and Economic Growth, Evidence from the South Eastern European Economies, Iustinianus Primus Faculty of Law, Skopje, 2009, p. 184
[16] .Ibid. p. 185

determinant of growth in the literature on economic growth. The explanation for this is that trade increases the pressure imposed by international competition, which in turn impacts the economy's productivity. Through exporting activities, a country could face higher demands for its goods and services, thus increasing production levels. Similarly, importing goods and services from abroad is said to improve the efficiency and productivity of domestic companies, which again leads to economic growth. Also about this category exists divided opinion about that it promotes growth.[17]   Therefore, in this case the value of the relationship between trade openness and growth is also expected to be ambivalent.

Table 1. Symbols, description and expected value of the explanatory variables

Symbol	Description of the explanatory variables	Expected value*
$lngdppc_{i,t}$	Logarithm of the initial level of real GDP per capita in 1972 USA $**	–
$edu_{i,t}$	Education of the population over 25 years of age (average number of years spent in education)	+
$popgr_{i,t}$	Annual growth rate of the population in the country	+ / –
$invy_{i,t}$	Foreign direct investment (as a percentage of GDP)	+ / –
$to_{i,t}$	Trade openness (export+import as a percentage of GDP)	+ / –
$govcons_{i,t}$	Government consumption (as a percentage of GDP)	–
$bureau_{i,t}$	Bureaucracy quality	+
$corrupt_{i,t}$	Corruption	–
$reer_{i,t}$	Real effective exchange rate	–
$polity2_{i,t}$	Constitution	+

Note:* "+" denotes a positive relationship, "-" a negative one and zero indicates a theoretically ambivalent relationship with a dependent variable.

** A logarithm of the value is calculated at this point to level off the large differences of the GDP growth rates per capita among the countries analyzed.

Government consumption (govcons) is yet another predictor variable used in the panel regression analysis. Levine and Zervos (1993) have undertaken to measure the government's involvement in economic activity by way of using the government-spending-to-GDP-ratio. Their findings show a statistically insignificant though negative correlation between government consumption in relation to GDP and economic growth. In the same manner, Barro (1996), Fischer (1993), Levine and Renelt (1992), De Gregorio (1993) and Easterly and Rebelo (1993) in their research have found a significant negative impact on growth of government consumption relative to GDP. Hence, it is evident that the relationship between the government consumption

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[17] The theoretical models of Grossman and Helpman (1991), Rivera-Batiz and Romer (1991) and the bulk of Edwards' empirical literature (1998), Frankel and Romer (1999), Wacziarg (2001), Greenaway et al. (2002), Foster (2008) and Wacziarg and Welch (2008) predict positive correlation, but the articles, such as Gabriel (2006) and Slaughter (1998))   show the opposite.

and the growth would be negative.

To further reinforce the empirical analysis and the results obtained, a few additional variables can be included, such as reducing corruption, improving the quality of state institutions, maintaining macroeconomic stability, ensuring efficient operation of the government, the legislation, the constitution etc.

2.2. Data and Methodology

The data used in this analysis have been taken from the World Development Indicators, published by the World Bank and refer to 84 countries for the period between 1972 and 2011, whereas for the transitional economies the relevant period is between 1994 and 2011. The countries included in the sample are as follows: nine advanced economies (other than EU-15)[18]; fourteen EU-15 (excluding Luxembourg)[19]; nineteen Latin America and the Caribbean countries[20]; seven East Asia economies[21]; thirteen Other emerging economies and middle-income countries[22]; two Low-income countries[23]; ten Central and Eastern Europe (EU10 minus Bulgaria)[24]; six EU candidate and potential candidate countries[25] and five EU neighborhood countries[26].

The panel regression analysis models are suitable for examination of the influence of foreign direct investment on economic growth. The Hausman specification test has demonstrated that it is more appropriate to use the panel model with random effects.

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18. Australia, Canada, Israel, Japan, New Zealand, Norway, Singapore, Switzerland, United States

19. Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden, United Kingdom.

20.Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Peru, Trinidad and Tobago, Uruguay, Venezuela.

21.China, People's Republic of, India, Indonesia, Korea, Republic of, Malaysia, Philippines, Thailand.

22. Algeria, Botswana, Egypt, Arab Republic of, Gabon, Iran, Islamic Republic of, Jordan, Libya, Mauritius, Morocco, Pakistan, South Africa, Syria, Tunisia.

23. Tajikistan, Namibia.

24. Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia.

25. Albania, Bosnia and Herzegovina, Croatia, Macedonia, FYR, Montenegro, Turkey.

26. Armenia, Belarus, Moldova, Kazakhstan, Ukraine.

The panel model with random effects looks like this:

$$y_{i,t} = \mu + \alpha_i + x_{i,t}\beta + e_{i,t} \quad (2)$$

To empirically assess whether foreign trade contributes to the discrepancies in the economic growth worldwide, in compliance with the elaborated analytical framework, the basic equation of economic growth is formulated in the following way:

$$gr_{i,t}=\alpha_1+\alpha_2 gr_{i,t-1}+\beta_1 ln(gdppc_{i,t})+\beta_2 edu_{i,t}+\beta_3 popgr_{i,t}+\beta_4 invy_{i,t}+\beta_5 to_{i,t}+\beta_6 govcons_{i,t}+\beta_7 bureau_{i,t}+\beta_8 corrupt_{i,t}+\beta_9 reer_{i,t}+\beta_{10} polity2_{i,t}+_{ei,t} \quad (3)$$

Where i indicates the countries included in the analysis (i=1, ..., 84), whose data are available throughout the period of the analysis, t denotes the time period (1972-2011), or more specifically the years included in the analysis, $gr_{i,t}$ is the average rate of real GDP per capita, $gr_{i,t-1}$ is the growth rate of real GDP per capita from the previous year,[27] α_1 is the common intercept, α_2 is a coefficient of the previous values of the dependent variable, β_i marks the inclination of the vector coefficients of the explanatory variables (Table 1), whereas $\varepsilon_{i,t}$ is a random error, which is individually and equally distributed over the time and the units.

The previously outlined regression equation is estimated by using the STATA 11.0 statistical software.

2.3. Results from the panel regression analysis

The results from the regression analysis are shown in Table 2. It consists of three regressions outlining the estimated coefficients of the appropriate independent variables and their levels of statistical significance assessed by the t-values. The first column portrays the estimated coefficients for all basic explanatory variables.

Generally, the coefficient of determination denoted by the value R^2 indicates that around 78.0% of the variations of the dependent variable could be accounted for by the variations of all independent variables included in the model, which points to the relative success of the model in explaining economic growth. The findings are statistically significant to a large degree

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[27] The inclusion of the growth rate of real GDP per capita from the previous year is justified by the slow change in or rather the persistent conduct of the growth rate. Namely, it has been confirmed that as with a great deal of other phenomena, the economic growth continues to move in a state of inertia here as well in a relatively stable ambiance, i.e. in the greater part it emulates growth from previous years.

and the coefficient values are consistent with economic theory.

The ***initial GDP per capita*** coefficient for the given period is statistically irrelevant in the explanation of the economic growth in the countries from the sample, which is somewhat understandable, considering the use of annual data instead of average values for specified time periods.

Independent variables	*Regression* The dependent variable is the average growth rate of real GDP per capita					
	[1]		**[2]**		**[3]**	
Natural logarithm if initial GDP per capita	-0.271		-0.230		-0.257	
	[1.23]		[1.05]		[1.15]	
Education of the population aged over 25	**0.186**		**0.151**		**0.121**	
	[2.51]	**	**[2.66]**	***	**[2.02]**	**
Population growth rate	-0.174		**-0.290**		-0.295	
	[1.05]		**[1.81]**	*	[1.73]	*
Foreign direct investment (FDI)	**0.069**		**0.081**		**0.077**	
	[3.09]	***	**[3.55]**	***	**[3.21]**	***
Trade openness	**0.006**		**0.005**		**0.004**	
	[2.75]	***	**[2.38]**	**	**[2.28]**	**
Government consumption	**-0.077**		**-0.071**			
	[3.10]	***	**[2.99]**	***		
Quality of bureaucracy	0.273		0.175		0.146	
	[1.56]		[1.01]		[0.85]	
Corruption	**-0.256**		**-0.207**		**-0.288**	
	[2.09]	**	**[1.82]**	*	**[2.55]**	**
Real effective exchange rate			**-0.003**		**-0.003**	
			[1.81]	*	**[1.89]**	*
Constitution (polity2)					-0.005	
					[0.17]	
Number of observations	1829		1829		1829	
Number of countries	84		84		84	
R^2	0.74		0.76		0.78	

Table 2. The influence of foreign trade on average GDP growth

Note: The asterisks indicate statistical significance of *** 1, ** 5 and * 10 percentage level

The coefficient for the human capital influence represented by the ***number of years spent in education by the population of over 25 years of age*** is in positive correlation with the economic growth and has a significance level of 5% in all regressions (except for the regression in column [2] with significance of 1%). This refers to the fact that each additional year in education is likely to increase the average annual GDP growth rate by 0.18 percentage points, which further confirms the fact that the human capital and knowledge employed to

generate new ideas and innovations lead to productivity improvement, increased investment rates and overall to heightened economic growth.

The coefficient of the ***population growth rate*** is statistically significant (with significance of 10%) in the second and third columns. The sign in all three equationc is consistent with the neoclassical theory projections, according to which a higher natural population growth (by 1%) is related to a lower economic growth rate (by around 0.29 percentage points).

The estimated coefficient of ***foreign direct investment*** is also stable in all growth equations, it is furthermore, statistically significant at a level of 1% and is in accordance with studies predicting a positive value of this relationship. Specifically, an increase in foreign direct investment (as a percentage of GDP) by 1% is related to a higher growth rate by 0.70 percentage points. Foreign direct investment has the role of a diffuser, facilitating the transfer of knowledge and technology, as drivers of economic growth. The transfer of technological and business know-how by means of foreign direct investment helps to close the gap among countries and can have spillover effects on the whole national economy. Their productivity levels and subsequently their impact on economic growth are contingent on the human capital disposable in the host-country which enables exploitation of the spillover effects on foreign direct investment. The findings are in favor of the hypothesis that trade openness influences and increases the likelihood of economic growth.

The estimated coefficient for ***trade openness*** (expressed as a trade-to-GDP-ratio) is statistically significant with a level of significance of 1% in the first column and 5% in the second and third columns. Hence, it can be concluded that trade openness encourage economic growth, but with a moderate overall effect.

The coefficient of ***government consumption*** indicates that the volume of government consumption has a negative impact on economic growth, i.e. the coefficient has the theoretically predicted value and is statistically significant at a level of 1%.

The additional variables that have been included in the model show that ***the quality of bureaucracy and the constitution*** are statistically insignificant in the determination of countries' economic growth, while ***the level of corruption and the real effective exchange rate*** are statistically significant standing at 5% and 10%, respectively. Both ***corruption and the real effective exchange rate*** have an inverse relationship with economic growth.

Conclusion

The results arising from the research indicate that foreign direct investment influences and increases the likelihood of economic growth. The panel regression analysis carried out has verified the fact that foreign direct investment rate is one of the key determinants of economic growth, in conjunction with human capital, the trade openness and government consumption. The former indicates that countries which are successful in international trade are open to foreign direct investment, attract foreign workers and achieve higher economic growth than countries which fail to integrate into the global economy.

As was presented the increase in FDI in the host county by itself doesn't mean a positive impact on economic growth, but it depends on many factors such as human capital, financial structure development, macroeconomic stability and another institutional factors. Some of them are not included in this research. Hence, in the future research it is important to include some of these variables which on indirect way trough FDI will encourage economic growth.

Furthermore, it would be especially interesting to analyze the contribution of FDI on economic growth only in developing countries because according to their degree of development and features, they have a different environment and conditions for the realization of this relation, hence the results would be different.

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ANALYSIS OF THE EFFECTS FROM SUSPICIOUS TRANSACTIONS REPORTING IN THE REPUBLIC OF MACEDONIA, MONTENEGRO AND THE REPUBLIC OF SLOVENIA

Abstract

Money laundering is a joint problem of the mankind. Along with some other aspects of underground economic activity, rough estimates have been put forward to give sense of the scale of the problem. According to a study conducted by the United Nations Office on Drugs and Crime, in 2009 criminal proceeds amounted to 3.6% of global GDP, with 2.7% (or USD 1.6 trillion) being laundered. However, these estimates should be treated with caution. They are intended to give just an approximation of the magnitude of the problem. Due to the illegal nature of the transactions, precise statistics are not available and it is therefore impossible to produce a definitive estimate of the amount of money that is globally laundered every year.

This study analyzes the statistical data gathered for three neighboring countries (Republic of Macedonia, Montenegro and Republic of Slovenia) related to the number of suspicious transactions reported annually, the corresponding activities taken, and the results achieved, the main purpose

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being exploring the effectiveness of the money laundering prevention systems in the selected countries. The study concludes that even though all the countries are similar with respect to territory, population, and structure and organization of their money laundering prevention systems, the results achieved from analysis and activities taken based on suspicious transactions reporting are significantly diverse from country to country.

Key words: money laundering prevention, suspicious transactions, Republic of Macedonia, Montenegro, Republic of Slovenia

JEL classification: K19

Introduction

Money laundering is the process of making illegally-gained proceeds appear legal (FinCEN 2008). When a criminal activity generates substantial profits, the individual or group involved must find a way to control the funds without attracting attention to the underlying activity or the persons involved. They do this by disguising the sources, changing the form, or moving the funds to a place where they are less likely to attract attention (ed. Turner 2011).The most common sources of funds of money launderers are trade in drugs, weapons, people, prostitution and in some countries tax evasion.

Even though money laundering has been going on for several thousands of years (ed. Turner 2011)[3], according to FinCEN (2008) the laws providing the law enforcement and regulatory agencies with effective tools to combat money laundering have been enacted since the 70tiese, in some countries even much later than that.

Money laundering is a joint problem of the mankind, since it can involve many countries, moreover as many countries and jurisdictions it involves as successful it is. Along with some other aspects of underground economic activity, rough estimates have been put forward to give some sense

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[3] No one can be really sure when money laundering first began. However, researchers are confident that it has been going on for several thousand years. In Lords of the Rim, Sterling Seagrave explains how, in China, merchants some 2000 years before Christ would hide their wealth from rulers, then move it and invest it in businesses in remote provinces or even outside China.

of the scale of the problem. According to a study conducted by the United Nations Office on Drugs and Crime, in 2009 criminal proceeds amounted to 3.6% of global GDP, with 2.7% (or USD 1.6 trillion) being laundered. This falls within the widely quoted estimate by the International Monetary Fund, who stated in 1998 that the aggregate size of money laundering in the world could be somewhere between two and five percent of the world's gross domestic product. However, these estimates should be treated with caution. They are intended to give just an approximation of the magnitude of the problem. Due to the illegal nature of the transactions, precise statistics are not available and it is therefore impossible to produce a definitive estimate of the amount of money that is globally laundered every year. The international organizations dealing with the problem (including FATF[4]) therefore do not publish any official figures in this regard (FATF 2011), accordingly when researching for latest data on the magnitude of money being laundered annually, for the purpose of writing this Paper, no recent data was available. It can be however reasonably assumed that with the increase of the technology and the financial crisis these numbers have gone significantly higher in the recent years.

According to FATF (2011), many governments have established comprehensive anti-money laundering regimes aiming to increase awareness of the phenomenon – both within the government and the private business sector – and to provide the necessary legal or regulatory infrastructure and tools to the authorities charged with combating the problem. Some of these tools include giving investigative agencies the authority to trace, seize and ultimately confiscate criminally derived assets, building the necessary framework for permitting the agencies involved to exchange information among themselves and with counterparts in other countries, gathering as much as possible data through reporting and processing the same.

With respect to gathering and processing as much as possible data, generally there are two types of reporting:

1) **Automatic reporting of cash transactions**, which is usually connected to a certain threshold of a cash transaction. This reporting

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[4] The Financial Action Task Force (FATF) is an inter-governmental body established in 1989 by the Ministers of its Member jurisdictions. The objectives of the FATF are to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system (http://www.fatf-gafi.org/pages/aboutus/).

does not necessary indicate that the transaction is suspicious, but that it has exceeded a certain threshold above which the institutions are obliged to report and

2) **Suspicious transactions reporting**, which is done through use of certain indicators based on which the regulated institutions have to determine, with certain percentage of certainty, if particular transaction/s is/are considered suspicious, consequently report it. It is not thus connected to a certain amount of money, but to having reasonable grounds to suspect a money laundering offence.

In order to have effective money laundering combat system these reportings should be done by as much as possible regulated institutions (such as banks, life insurance companies, brokers and agents, securities dealers, money services businesses, accountants and accounting firms, real estate agencies,casinos, dealers in precious metals and stones, etc.). The reports are usually being submitted to special money laundering prevention authority (agency, unit, directorate, etc). This authority than has the investigative powers and should have strong network with other institutions such as public prosecutor, financial crimes unit, police, etc. Each institution, within its legal powers performs, certain functions and coordination between these institutions and the functions they perform enables smooth functioning of the system and the needs and interests of its citizens.

As stated above, the suspicious activities reporting is done through use of indicators of suspicious transactions. These indicators are designed to help assess whether or not transactions might give rise to reasonable grounds for suspicion. There are examples of common and industry-specific indicators that may be helpful when evaluating transactions, whether completed or attempted. They include indicators based on certain characteristics that have been linked to money laundering in the past (Romaniuk et al. 2007). The need of establishing indicators has been based on a FATF recommendation. However, since there are no uniform international indicators to be used by all regulated parties, countries define their country specific indicators, in consultation with reporting entities, law enforcement agencies and international organizations. The indicators are not intended to cover every possible situation and are not to be viewed in isolation. A single indicator is not necessarily indicative of reasonable grounds to suspect money laundering activity. However, if a number of indicators are present during a transaction or a series of transactions, then a closer look at other factors prior to making the judgment whether the transaction should be reported or not, might be necessary.

This study shall analyze the statistical data gathered for three neighboring countries (Republic of Macedonia, Montenegro and Republic of Slovenia) related to the number of suspicious transactions reported annually, the corresponding activities taken, and the results achieved, the main purpose being exploring the effectiveness of the money laundering prevention systems in the selected countries. The choice of the countries was made taking into consideration that all the countries are similar with respect to territory, population, history in part (all of them have been part of one country Former Yugoslavia) and structure and organization of their money laundering prevention systems. Out of the three countries, only Slovenia is a member of the European Union. For the purpose of analysis the annual reports for 2014 of the relevant authorities for money laundering prevention and other officially published data were used. The results are given comparatively and are the following.

The Analysis

Basic Info about the Countries

Teritory and Population

Macedonia stretches over 25,713 km2, with a population of 2,091,719, Slovenija over 20,273 km2, with population of 2,050,189, while Montenegro streches over 13,812 km2 and has 650,036 population.

Gross Domestic Product (GDP)

In 2014 Macedonia had $10.92 billion GDP, with $13,200 per capita, Slovenia had $49.48 billion GDP, with $23 999 per capita and Montenegro had $4.66 billion GDP, with $15,200 per capita.

Budgets

The Budget for 2014 for Macedonia was $3.320.000.000, for Slovenia $22.030.000.000, while for Montenegro $1.630.000.000

The above numbers presented together comparatively are as follows:

Country	Macedonia	Slovenia	Montenegro GDP
Teritory and Population	25.713 km2 with a population of 2.091.719	20.273 km2, with population of 2.050.189	13.812 km2 and has 650.036
GDP and per capita 2014	$10.92 billion, i.e. $13.200 per capita	$49.48 billion, i.e. $23.999 per capita	$4.66 billion, i.e. $ 15.200 per capita
Budget	3.320.000.000 USD	22.030.000.000 USD	1.630.000.000 USD

Organization of the Country Money Laundering Combating Authorities

The central authority with money laundering combat competences in Macedonia is named Financial Intelligence Unit, in Slovenia it is named Office for Money Laundering Prevention of the Republic of Slovenia, while in Montenegro it is named Administration for Prevention of Money Laundering and Terrorist Financing.

Macedonian authority in 2014 had 28 (in 2015-34) employees, the Slovenian authority employed 19 employees, while the Montenegrian anthority had 32 employees.

Macedonian and Slovenian authorities are part of the Ministry of Finance, while the Montenegrian authority is not part of the Ministry of Finance, but is still a governmental body. The Directors of the authorities are elected by the Government, on proposal of the Ministry of Finance, for a term of 4 years.

All the authorities have similar organizational structure, having at minimum the following units (with slight differences in terminology):

- Unit for Prevention and Monitoring and Supervision
- Unit for Analysis of Transactions (Regular and Suspicious Transactions)
- Information Technology
- International Cooperation

Apart from the above units, Macedonian authority has special unit for prevention of terrorist financing which is not the case for Slovenia and Montenegro where this function is placed within other functions.

What makes Macedonian authority different from the Slovenian and Montenegrian is also the fact that in Macedonia the monitoring and supervision of all the regulated entities is performed by one body, i.e. by the Financial Intelligence Unit, while in Slovenia and Montenegro it is performed by many bodies, i.e. the relevant supervisory authorities for the respective industries, together with their general supervisory functions, perform monitoring and supervision of the anti money laundering mechanisms of the entities under their jurisdiction.

When it comes to the legislation, Montenegro has adopted new law on money laundering prevention in the second half of 2014, while the last changes of the Macedonian law were made in 2013, and of the Slovenian law in 2014, with pending changes to be made of the Slovenian law in 2015.

Even though much more entities are required to submit reports, the authorities in all of the countries mainly receive information from:

- Banks and other financial institutions
- Insurance companies
- Notaries and very few from lawyers
- Legal and natural persons that trade with vehicles.

Some of the Indicators of suspicious activities based on which most of the reports were submitted in 2014 are stated below, noting that in practice there are much more indicators to be considered when monitoring a transaction:

1. Several linked cash transactions in amounts less than the automatic reporting threshold (currently EUR 15,000) which all together exceed this amount, if such transactions are not consistent with the client's usual business activities;[5]

2. Deposits or withdrawals of large amounts of money (in local or foreign currency) which significantly differ from the client's usual transactions, being inconsistent with the client's income or status, especially if they are not typical for the client's business activity;

3. Depositing a large amount of cash as collateral for a loan. Subsequently, a sudden request by the client to repay the loan before the maturity date;

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[5] The Indicators used in this section of the Paper are taken from the List of Indicators of Suspicious Transactions defined by the Serbian Administration for Prevention of Money Laundering. However, indicators defined by other jurisdictions can also be used for the same purpose, since even though there are no internationally defined indicators, they are rather similar for every country, varying slightly dependant on some specifics of the banking sectors of the countries.

4. Large amounts deposited into an account, than anorder to the bank to transfer the funds in favor of several persons' accounts, especially when it is noticed there is no rational explanation or economic justification to such transactions;

5. Transactions requiring several intermediaries or several accounts, especially if the parties to the complex transactions come from the non-cooperating countries and territories, or countries with strong bank secrecy;

6. Transactions marked as "unusual" by bank employees based on their knowledge andexperience;

7. Transactions with persons or entities registered in countries which have a reputation for drug trafficking, or have strict bank secrecy laws in place, or are known as off-shore centers or are on FATF list of high risk or non-cooperative countries/jurisdictions.

Cooperation with other institutions is crucial for effective money laundering combat, therefore it is interesting to state that in 2014 the Macedonian authority for money laundering prevention has initiated total of 31 cases for further investigation, Slovenian authority has initiated total of 247 cases, while Montenegrian authority has initiated total of 20 cases for further investigation. More precisely the numbers are as follows:

Competent authorities	Macedonia	Slovenia	Montenegro
Ministry of Internal Affairs	25	157	3
Financial Police	4	/	/
Public Prosecutor	2	10	15
Revenue Office	/	80	2
Total	31	247	20

Blocked Transactions

During 2014, in Macedonia 4 orders for temporary detention of transactions were submitted to banks in amounts of MKD 4,000,000, EUR 297,173.25, USD 310,928 and GBP 341,500. These amounts converted to US dollars add up to USD 1,385,656. In Slovenia 12 orders for provisional

measures were submitted to banks, in a total amount of EUR 6,746,002 i.e. in USD 9,188,058, while in Montenegro 14 accounts were blocked and 15 transactions detained, in amount of EUR 6,938,037 and USD 486,072. All of these transactions converted to US dollars come to US 9,935,681.

International Cooperation

In 2014 the authorities of the three countries realized cooperation with foreign financial intelligence agencies, and relevant international organizations and bodies. They also fulfilled the requirements imposed with membership in MONEYVAL and the Egmond Group. Up to 2015 macedonia has signed 53, Slovenia 42 and Montenegso 31 Memoranda of Cooperation with other countries.

Below are the numbers related to international data exchange in 2014:

	Macedonia	Slovenia	Montenegro
Requests for data FROM international bodies, organizations, countries	32	164	40
Answered Requests	32	164	45
Requests for date TO international bodies, organizations, countries	29	216	142

A correlation of the total amounts of money blocked under a suspicion with the number of employees in the respective authorities provides that:

- In Macedonia 49,488USD were blocked per employee (total of 28 employees)
- In Slovenia 483,582USD were blocked per employee (total of 19 employees)
- In Montenegro 310,490USD were blocked per employee (total of 32 employees).

Conclusion

According to the Financial Action Task Force (2011) money launderers tend to seek out countries or sectors in which there is a low risk of detection due to weak or ineffective anti-money laundering systems, corruption, political risks. From the data above it can be concluded that there is a considerable deviation in the effectiveness per employee in the relevant countries, Macedonia being the one lagging behind Montenegro and Slovenia.

Taking into consideration the similarities in terms of territory, population and organization of the money laundering prevention authorities of Macedonia and Slovenia, and proportionally of Montenegro it is difficult to propose the real reason for the variations in productivity in the respective countries.

- Considering the fact that a system of money laundering prevention cannot be effective if there is a lack of political will (Hinterseer 1989), a possible reason for these variations may be exactly this. Moreover, in the recent years, no or insignificant information was conveyed to the public in Macedonia and partially in Montenegro about money laundering investigations involving politically exposed persons.

- Considering the fact that the basic prerequisite for efficient functioning of the money laundering prevention system is consistent and strict compliance with legal requirements and performance of responsibilities of all the pillars of the money laundering prevention system, i.e. the regulated entities, money laundering combating authorities and investigative bodies (Macedonian Money Laundering Prevention Directorate 2010), another reason for such variations in performance may also be lack or weakness in the operation of any of these three pillars.

- Lastly, Slovenia is the only country in this group that is a member of the EU Union, which can also lead to a suggestion that possibly the integration in a system of countries, such as EU Union, may by itself impose greater expectations on its members with respect to money laundering prevention and productivity per employee of the respective authority.

Further research can be done in order to test these suggestions, with analysis of the productivity of the respective authorities in a sample of other EU countries, and possibly also analysis of the anti money laundering system and productivity of the US respective authority/ies.

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KATERINA HADZI NAUMOVA – MIHAJLOVSKA [1]

REENGINEERING IN ORGANIZATION OF ORGANIC AGRICULTURAL SECTOR IN REPUBLIC OF MACEDONIA

Abstract

Organic agricultural production in Republic of Macedonia is recognize as an approach to sustainable development with excellent conditions for development in the country because agricultural production in the country is traditionally family business which met local knowledge and traditions and also the adoption of the Law on Organic Farming followed by appropriately defined agrarian policy. Although, organic agricultural production is faced with problems in organizing of business process in the organic sector as uncertain sale of the production, export disorganized followed by inadequate organization of producers of organic products or associations. Regarding the manner of organizing the paper is shown in reengineering as an opportunity to reorganize the existing organic sector especially associations as main carries to make radical changes in its operations and to improve their way of working to achieve their goals.

Key words: reengineering, organic sector, organic production, Republic of Macedonia

JEL classification: Q13; Q19

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Introduction

Main characteristic of Macedonian agriculture is traditional extensive agriculture proceed in mountain areas, which is main precondition for development of organic production. Also, state support for organic agriculture is high, except subventions main role has legislation which establishes the rules for organic production in Republic of Macedonia. Organic production in the Republic of Macedonia is recognized because of traditional mode of production in some regions where they are produced. Macedonian consumers often say they are "ecologically, quality and our". The organic sector in the country is by no means a homogeneous economic area. As part of agriculture is characterized by a heterogeneous structure in which besides agriculture, are included environmental, social, health and economic structures. The organic sector in Republic of Macedonia is composed by producers, cooperatives, associations, counseling stakeholders, control and certification bodies and government institutions involved in the implementation of organic farming policy.

Practice show that the method of production in the country is not an issue because all participants are united by certifying the method and procedure of producing organic products. Certification of organic products is a formal and documented procedure by which a third party (certification body) assures that organic standards are respected. The process involves hiring a certification body that will make the inspection and issue a certificate, which is a cost for the manufacturer, but on the other hand leads to consumer confidence in organic production systems and products. Certification of organic production gives a distinct identity and credibility and makes it easier market access.

Nevertheless, Macedonian organic sector are facing problems such as insufficient quantity for sale and poor market organization. Additionally, there is fragmentation among the associations i.e. the existence of several associations of producers of organic products for the same products in the same region. It is a vicious circle, on the one hand the current offer of organic products is low, and on the other hand there is inadequate internal organization of producers and associations of producers of organic products.

Therefore, the paper shows the new management concepts developed in the USA - reengineering with the emphasis on its application in the organic sector in the Republic of Macedonia. Although initially reengineering is

defined as a method of restructuring of business activities in order to innovate the production process, today considered a modern management concept that convenient ground for its development is in transition countries. Namely, products that come from this countries can't compete in quality our price to the European and world market. Therefore in the paper is show some indications of disorganization of the organic sector in the country and possible reengineering model developed with positive implications of its use.

1. DEFINITION OF REENGINEERING

Reengineering represents a process of changing thoughts to perform certain activities in business processes to achieve dramatic improvements in terms of quality, cost, service and speed. The introduction of reengineering in the company or organization starts without assumptions, initially determined that the company must make, and then how to do it. So, it's ignored the current situation and created new ways of doing work or etc. radical redesign.

Reengineering used for an innovation of business and assumes making a big step. It involves great knowledge, proper motivation, decision-making organized teamwork and consistently focusing on client needs. Management who wants to achieve reengineering must take account team approach because reengineering is fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in the performance of the highest production trinity - quality, price / cost and time of manufacture / delivery.

Hammer and Chempo explored reengineering approach and proposed nine principles:

- Identification of all business processes in the company and prioritized according to their urgency redesign.

- Organization focus on outputs, not tasks. When is possible, one person performs all the stages in a process. Planning of work and people to be about a subject or output, rather than a single purpose.

- The one who applies the output of the process, need to realize.

- The transfer of information should take place in the real work, as part of it. One who acts in the process also creates information. Information technology shortens the time required for a handover information and

automate data transfer. With the technology based on computer process is continuously controlled.

- Geographically widespread sources should be treated as centralized.

- People who work the work should be allowed to make decisions.

- Databases, telecommunications networks and standardized processes allow employees who are physically remote achieve economic activities and to maintain flexibility and service.

- Parallel activities should be linked and managed so that they should be carried out with more satisfaction than be treated as sequential objectives (that follow one after the other).

- The information should be retained at source. By integrating and collecting data in computer systems, the company eliminates the problematic data correction of errors.

The principles of reengineering suggested by Hammer and Chenmo, create features, such as:

Focus on the customer - the main goal of reengineering is meeting the needs of the client. It is a starting point for change - identifying client needs, creating infrastructure for supporting their expectations and process design in line with company objectives.

Combining a few things - basic and most common work process reengineering is integrating and concentration of many different activities and tasks. The results are striking in terms of elimination of errors, delays and re-work generated thereby.

Decisions are made by those who do the work - companies introduce reengineering, not only have horizontal compaction process (thereby reducing the number of people working different things) but have vertical density, i.e. employees working in a specific task in the event of a problem, the decision adopted. Thus decisions become part of his work and the employees are given the right to be responsible for them as the central idea of reengineering. Additional benefits of lower costs, better response to customer and employee empowerment.

The processes are performed in a natural way - in the reengineering work flows in the planned direction or succession. Thus work is performed more quickly and can obtain results.

Work is performed where it has most sense - many of the works carried out in a company include integrated parts that are performed in other

organizations. Relocation of work across the boundaries of the company eliminates the need for integration.

Represented hybrid centralized / decentralization operations - companies that have introduced reengineering are able to combine the advantages of centralization and decentralization in the same process. Information technology enables companies to have individual units are completely self-contained, representing decentralization, while centralized using the data and the company's strategy.

Processes have multiple versions - to meet the demands of the modern business world need multiple versions of the same process, so that each would meet the requirements of different markets, situations or inputs. Moreover, these processes must be economically equivalent and optimized. First, the classification of these processes to determine which version is the best of the situation.

The checks and controls are reduced - reengineering used control only to see that they have economic sense. Control and checking is built into the process and are part of the job.

Minimize compliance - reengineering reduces the need for compliance with reducing the external contact that has the process, thereby reducing the chance of inconsistent data that will be necessary alignment.

Operators in service sales are fully informed - in reengineering operators in service sales are supplied with all the necessary information at any time can give an appropriate response to the customer. This reduces waiting time and customer dissatisfaction.

With the introduction of reengineering changing operating units - from functional departments to process teams, the role of the staff - from controllers to authorized persons, changing the preparation for work - training in education, changing the criteria for the assessment - the assessment of the activities to evaluating results, changing value - from protective to productive, changing organizational structure - from a flat hierarchy structure and changing top management - from collectors of points leaders. Reengineering is a dramatic change in all activities.

2. **THE ROLE AND MEANING OF ORGANIC AGRICULTURE IN REPUBLIC OF MACEDONIA**

Republic of Macedonia is situated in the southern part of the moderate zone and is bordered by the subtropical zone where almost all the crops can be successfully produced according to their requirements. The agriculture has been very significant for the national economy of the Republic of Macedonia. Besides the many policies and economic problems, that were previously stated, this sector has indicated an important flexibility, and for this period it has contributed significantly to the social and economic stability. The agriculture has a share of about 8,9% in the GDP in 2013, two thirds of which are covered by crop production and the remainder by livestock production.

Biological diversity in agriculture is especial important for persistence of people, primarily because of gratification of basic needs for food. With civilization development has create new type with better quality. But, in time, many of types and breed were destroy as genetic resource. Types, sorts and races who are domestic for Macedonia should be save above all for economic, science, cultural, socio-economic and ecological arouse. Republic of Macedonia characterize with traditional agriculture especial in mountain areas. Organic agriculture is close to traditional agriculture, so it has a potential for development.

In the Republic of Macedonia organic agriculture is regarded as important to the development of the national agriculture and food production, which at the same time is environmentally sustainable and can generate many positive impacts to rural areas and the society in general. Also, it has excellent conditions for the development of organic agriculture because agricultural production in the country is traditionally a family business which meets local knowledge and traditions.

The mountainous areas in the country are characterized by particularly suitable environmental conditions for development of organic farming. Products originating from those areas already enjoy a good reputation among consumers who say they are "environmentally friendly" or products produced in the traditional way.

The annual report for agriculture and rural development showed that 2,74% form all agricultural cultivated land is an organic production. The interest for production of organic food is to a significant level, but there are many limiting factors. Namely, the graph 1 show that the number

of certificated producers of organic food in Republic of Macedonia notes continual intensive increase alongside the surface in organic production, but the last three years are decreased. Beside the climate change particularly affected the Macedonian agriculture, main reasons for decreased interest are the reduction of the population in rural areas and lack adequate logistical support to the overall organic agricultural sector. Graph 1 Area under organic production and the number of operators during the period 2005-2014
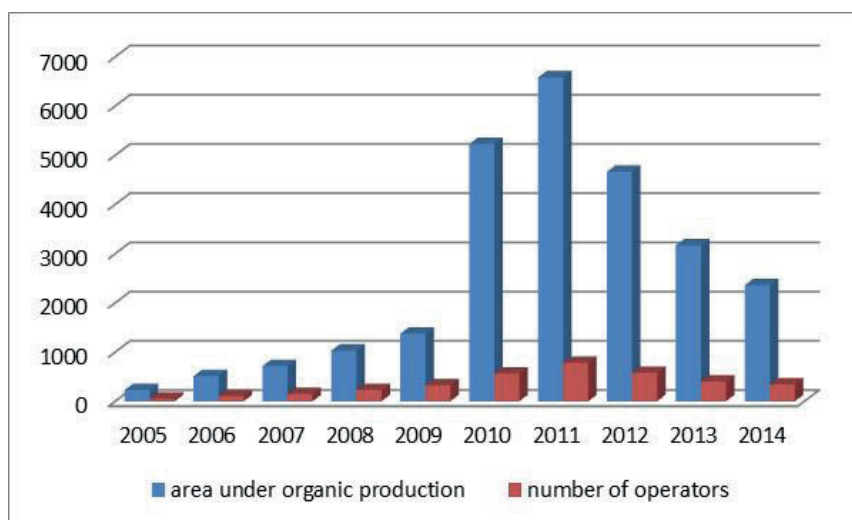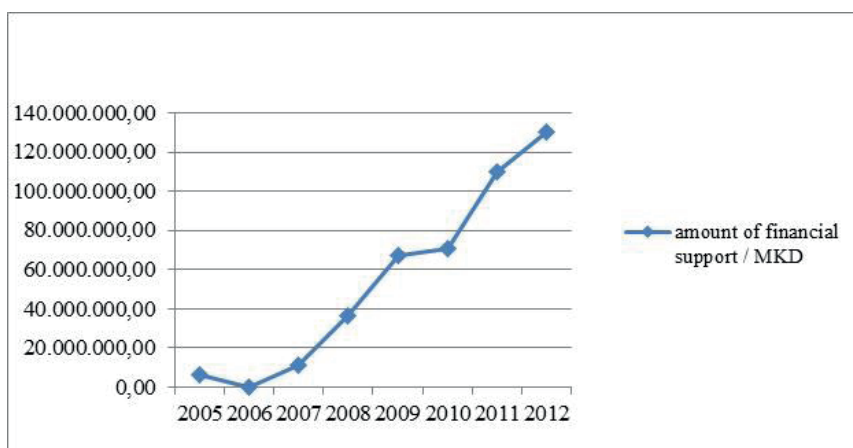

Source: Ministry of Agriculture, Forestry and Water Management of Republic of Macedonia, http://www.mzsv.gov.mk/organsko_zemjodelsko_proizvodstvo2013.pdf, 19.12.2015

According to last data from the Ministry of Agriculture, Forestry and Water Management of Republic of Macedonia, leading crop in organic vegetable production are cereals with 896.4 ha production area, and in organic livestock production are sheep breeding with 53484 numbers of sheep.

In the increasing of number of operators and area under organic production partial contribution has the increase in subsidies from the state. The Graph 2 presents the financial support (subsidies) for the period 2005-2012 for organic production which can be seen intense growth.

Graph 2 State support for organic agriculture in Republic of Macedonia

Source: Ministry of Agriculture, Forestry and Water Management of Republic of Macedonia, http://www.mzsv.gov.mk/organsko_zemjodelsko_proizvodstvo2013.pdf, 19.12.2015

The market of organic products in Republic of Macedonia is on low level, offer by quantity and assortment doesn't enable some significant export, and on the other side low domestic demand is limiting organic production. Deficiency of domestic organic processing products additional is limiting organic market development.

Organic agriculture is regarded as one important to agriculture and food production that is environmentally sustainable and can generate several positive impacts to rural society in Republic of Macedonia. Defining the main feature of organic agriculture and its importance is the starting point for conceptual establishment of organic agriculture.

3. ORGANIZATION OF ORGANIC SECTOR IN REPUBLIC OF MACEDONIA

The organic sector in the country is by no means a homogeneous economic area. As part of agriculture is characterized by a heterogeneous structure in which besides agriculture, included environmental, social, health and economic structures. What makes organic production different from other ways of ecological production is the way of certification of products,

hence the participants in the process of certification of organic production, field production and marketing makes way of organizing specific and unique. The organic sector in Republic of Macedonia is composed by producers, cooperatives, associations, counseling stakeholders, control and certification bodies and government institutions involved in the implementation of organic farming policy.

The main drivers of the organic sector in the country are *the farmers* of organic production. They are mostly found in the form of an individual farmer and family farm (farm which the family constitutes the basic workforce). Individual producers of organic products in the country, organic production can be organized as organic vegetable and livestock production. Family farms are mainly producers of primary production and the main objective is the production intended for the market, and a small part for household.

Cooperatives of producers of organic products in the country are relatively new way of association. In fact, the term "co-operative" is still equated with cooperatives from the previous system of social order where the association was not voluntary and not based on a system of cooperative values. The formation of cooperatives of producers of organic products in the country is regulated by the Law on Cooperatives and aiming economic association of producers on a voluntary basis, to promote organic production and joint market. Given the mentality, lack of confidence in the system that result in negative experiences Cooperatives from the previous system, cooperatives in the Republic of Macedonia are very few in number. They began to form with the adoption of the Programme of Financial Support to Rural Development through which financially supports the establishment and operation of agricultural cooperatives.

The associations are often common form of jointly organizing the organic sector in the country. The main purpose of pooling individual producers of organic produce is a joint purchase of raw materials in order to be cheaper and timely obtaining loans, purchase of equipment and other fixed assets, planning distribution channels and their common use in order to make production more competitive , exercising the rights to influence relevant government institutions when making important legal and sub-legal acts in the interest of both producers and end what matters most, successful research and approach to the market and identification of new markets and new market segments.

The highest form of association in the country's Federation of Organic Producers (FPOP) aimed at ensuring the coordination

and leadership of the organic movement in the country. FPOP aims to protect economic, social and cultural interests of manufacturers of organic products and working to improve the conditions of market production.

Organic farming is a relatively new concept in the country, hence the interest in research despite There is interest in providing useful information and advice on the application of this concept. Advisory entities in the Republic of Macedonia for organic production is an important element in achieving successfully organized organic production. Besides advice on the organization of production, offering assistance in developing business plans, development plans and feasibility studies, as well as filling in all necessary documents in the control and certification of organic production. The biggest producers receive support from the very certification / control bodies besides them through the administrative procedure for certification educate them about the process of organic production. Within FPOP there is an advisory service that provides support to producers of organic products.

The certification is an important key element of organic production which assumes defining the principles that must be met to allow the proceedings to be declared as "organic." The process involves engaging certification body that will make inspection and issue a certificate. Under the organic farming control and certification of organic production performs authorized domestic or foreign legal entity - control / certification body. In Republic of Macedonia there are two certification bodies accredited by the Accreditation Institute and authorized by the Ministry of Agriculture, Forestry and Water Management: Balkans Biocert and Pro-CERT. These certification bodies provide expert control in organic production in accordance with standard EN 45011 and ISO / IEC Guide 65 (General requirements for bodies operating products certification system).

In the implementation of organic agricultural policy, directly or indirectly participate in the following national institutions:

- Ministry of Agriculture, Forestry and Water Management. For the promotion, development, promotion and coordination of organic farming, the Minister of Agriculture, Forestry and Water Management formed Committee of organic farming which gives its opinion in the field of organic farming, especially for the annual program to encourage the development of organic farming proposed significant regulations and individual projects, and other issues related to organic farming.

Then the responsibility of the Ministry is published in the Official Gazette and on the website of the Ministry a list of fertilizers and improve soil, list of products for plant protection, a list of ingredients They were not produced according to the principles of organic farming and a list of cleaners and disinfectants that can be used in the country. Ministry based on the annual reports of the control / certification bodies publishes an annual list of reproductive material from species that are found in regular production and which may be used in organic crop production. The Ministry shall establish and maintain records and databases and are published on the website of the Ministry. Minister of Agriculture, Forestry and Water Management empowers the control / certification body for performing expert control in organic farming. It also mandates all rules and regulations for production of organic agricultural products in accordance with the organic farming

- Ministry of Environment and Physical Planning. Within the implementation of organic agricultural policies responsible for nature protection and biodiversity, the sustainable use of natural resources, for issuing export permits for wild collected herbs, berries and mushrooms, to develop a network of protected areas (strict nature reserves , national parks, natural monuments, etc.).

- Ministry of Economy. Organ that is part of this ministry and has jurisdiction in controlling trade in organic products and is responsible for the regulation of domestic and foreign trade and consumer protection is the State Market Inspectorate.

- Ministry of Finance. Within the implementation of organic agricultural policy it is responsible for approving the budget and medium-financial support in agriculture, the customs system and customs enforcement provisions. Ministry in accordance with these functions directly involved in the payment of subsidies for organic farming and the funds for other programs to support organic farming. Also, this Ministry is involved in the import / export of organic products of the customs provisions relating to this type of products.

- Institute for Accreditation of Macedonia (IARM). The institute is responsible for accreditation of the bodies for inspection and certification of organic agricultural production and organic products.

- Standardization Institute of the Republic of Macedonia (ISRM).

- National Institute of Industrial Property (SIPO). The institute is

responsible for the technical proposition for certain areas (national or private standards), and standards on which he relies organic farming.

- Higher education and scientific research institutions. Within the implementation of organic agricultural policy, the Office is responsible for registering the sign for organic products. Within these institutions there are departments for Ecological Agriculture responsible for providing technical advisory assistance for the organization of the organic farming. Also performed some laboratory and pedological analyzes at the request of private parties or an institution for the organic production.

- Agency for Promotion of Agricultural Development (NEA). Counselors employed in NEA have a role to help farmers with advice on organizing organic production economical aspect.

- Agency for Financial Supports Agriculture and Rural Development (AFSARD). AFSARD role is to implement measures to support and encourage organic agriculture with manufacturing, receipt, processing and payment of claims on the use of state aid (subsidies).

State institutions aim to learn about the potential benefits, opportunities and problems faced by all stakeholders involved in organic farming to be able to contribute to improving policies for organic farming in the country.

4. POSSIBILITIES FOR IMPLEMENTING REENGINEERING IN ORGANIZATION OF ORGANIC SECTOR IN REPUBLIC OF MACEDONIA

Reengineering is a process of changing thoughts to perform certain activities in business processes to achieve dramatic improvements in terms of quality, cost, service and speed. Reengineering the organic sector derivative aims to reorganize and redefine the activities associated with the maximum use of available resources (natural, human, organizational and technological) and thus to innovate the manufacturing process and meet the demands of market - food with high quality and low price. Proper application of reengineering involves application of principles already defined through several phases:

1. Defining the mission and vision of the association which involves informing the presidency process reengineering techniques, analysis of the current process of operation, defining the goals they want to achieve with reengineering and identification of key processes that will implement the goals and analysis of the consequences.

2. Analysis of the current state of the association when it is necessary to carefully analyze all processes, activities and resources of the association, and to identify and understand customer requirements.

3. Recognizing and planning new activities can reengineer a direct result of the analysis, and consists in understanding existing processes and detect deficiencies as poor communication among members, poor use of information technology and the like.

4. Project some processes involves designing new processes with a main emphasis on quality as a means of working, such as the use of the Internet as a means of communication between members and the presidency.

5. Simulation and testing of the new solution is an important step in detecting failures in introducing something completely new with a significant role information technologies.

6. Application and evaluation of the new solution involves evaluating new solution from all aspects - quality, quality, time, technical - technological, utilization of resources and capacity, motivation of members and communication is needed in applying TQM techniques or tools and methods of quality management: Pareto diagram, Ishikawa diagram, map, etc. trend.

In applying reengineering it is necessary to carry out the planning process and fulfill more requirements that are critical for organic production as part of agricultural production (Figure 25). These are:

- Economic requirements - the cost of agricultural production, the price of inputs and purchasing power.

- Environmental requirements - protecting the environment, stimulating the development and use of alternative energy sources, production of healthy food.

- Technological requirements - innovation in production, following the latest scientific and technological achievements in agricultural production.

- Requirements on the market - competition analysis, prediction of

possible market and economic trends.

- Social requirements - improving the quality of life.

Figure 1 Reengineering in organizing of organic sector in Republic of Macedonia
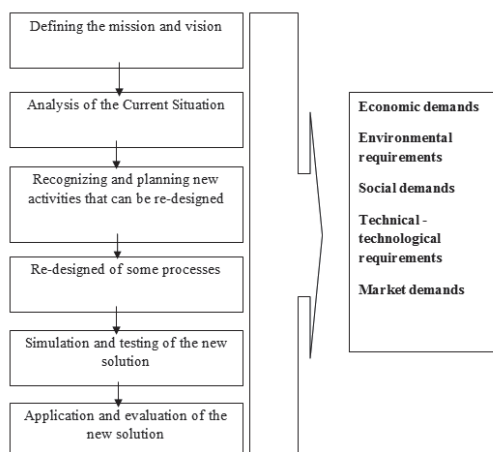
Source: Custom with Heleta M., "Menadžment kvaliteta", Univerzitet Singudum, Beograd, 2008

Reengineering is special assignments can't be unified, that there is no standard solution that can efficiently be performed. Also due to the specifics of organic production as part of agricultural production, access to reengineering should be the creation and promotion of research - development teams within the association, cooperation with scientific institutions in the field and introduce a new concept of managing human resources - creating teams.

Conclusion

Main problem in organizing of business process in the organic sector in Republic of Macedonia are uncertain sale of the production, export

disorganized followed by inadequate organization of producers of organic products or associations. Therefore, it's necessary to reorganize and redefine the activities associated with the maximum use of available resources (natural, human, organizational and technological) and thus to innovate the manufacturing process and meet the demands of market - food with high quality and low price.

The reengineering as a modern management concept which is based on radical changes in its operations and improving way of working to achieve the goals can introduce teamwork means that all work on a common goal, everyone is responsible and everyone does its best. It can be said that its application is an opportunity and challenge that requires a gradual, systematic and continuous approach to achieve long-term development and progress of the work and successful market performance.

The concept of reengineering has future in the countries like Republic of Macedonia, since the products originate from there, neither in quality nor in price can compete on the markets of EU countries. The changes that need to be made should be directed to real-defined goals, according to the possibilities. Its purpose is to innovate existing production process by reorganizing and redefining business processes and respond to the stringent requirements of global and domestic market.

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ETEPRENEURSHIP AND CULTURAL ANIMATION IN TOURSM

Abstract

The Entrepreneurship is complicated process that in the cultural-amusement animation of tourism become even more complicated. In the contemporary tourism, the cultural-amusing animation is at the same level as the food and the accommodation. This animation contributes to avoid the monotony and boredom of the guests/visitors. The visitors need diversion and dynamics during their tourist stay. There is nothing more destructive for them as the feeling of boredom, itself. The whole phenomenon of amusement and diversion is very relevant and characteristic for the human and it has its roots in the need for change, because the diversion is nothing but a kind of change in the activities.

Key words: Entrepreneurship, tourism, animation, cultural-amusement animation
JEL classification: M, M2, M21

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Introduction

The tourist offer should be based on study and research of the tourist needs, i.e. it should be based on study of the tourist motivation, as well as of the factors that influence the choice of tourist destinations and the kind of tourist stay. This approach to the tourist offer is a fore condition in satisfying the needs and affinities of the visitors, as well as a fore condition for the competitiveness, quality and financial effects (the profit). The adjustment of the offer to the tourist demand involves research of the tendencies and directions of the contemporary international tourism and research of the characteristics of the tourist patronage i.e. their needs and interests. More specifically, the time of the romanticism, when the basic motif of a tourist travel was only the site seeing of the natural attractiveness, has passed. The contemporary visitors are no longer passive observers of the nature. The tourism is no longer content for site seeing; nature has stopped being only a visual phenomenon. The visitors want to fight and test their strength in it. The lakes, mountains and the valleys are not created for the dreamers, but for the realists, who like, explore and change them. The role of the visitor is no longer compared to those who appear behind the scenes created by God, but to the participants who actively take part in the great spectacle of nature. Thus, the tourist offer should be enriched with various contents in the field of the cultural-amusement life.

1. TOURISM

Movement is one of the economic features of the human being. Tourist movements into the context of organized migration movements. (Мариноски, 1992:12). Tourism is a relatively new social - economic phenomenon. It occurs to some extent the development of the main factors that influence the result of socio - economic development. (Нејков, 1983:7). Particularly evident when the number of people who engaged in leisure travel received such dimensions that began affect the formation of certain other events and relationships, which in turn contributed to tourism becomes particularly important factor in social and economic terms. (Аврамоски, 1997:9). It is a complex and multidimensional social phenomenon which bears scars and determinants of overall social structure. (Тоноски, 1993:49). In fact, it can rightly conclude that tourism is a

specific phenomenon that acts multiplier the various aspects of socio - economic life of certain regions, countries and even continents.

In other words it is not industry, and includes more economic activities (catering, transport, travel agencies, trade, crafts, community activities, etc.). No medical branch, but includes activities rather than medicine. Although there is a branch of culture, covering many fields of cultural activity. It covers many sporting activities, although it is a branch of sport. It is not a political phenomenon, but in multiple interdependence with the political climate in the country. It is not considered a natural phenomenon, but is repeated interdependence with nature. (Јаковлев, 2000:21). There are numerous definitions of tourism, but is considered the most acceptable definition gave Swiss Hunziker and Krapf in 1942, which states: "Tourism is a set of relationships and phenomena resulting from the travel and stay of visitors in one end if he does not stay permanent settlement and not tied to the acquisition of income." (Ацковски, 1995:45).

The need for people to travel temporarily outside their place of residence derives from those living in urban and health unfavorable environment and under conditions that are harmful to their mental and physical health. It is this fact has become the main motive of the mass tourist movements that get wider. Accelerating urbanization, and hence the popularization of tourism particularly affect the following factors:

1. economic factors;

2. technical factors;

3. social factors;

4. factors of an institutional nature;

5. other factors of psychological and irrational nature.(Мојсоски, Шуклев, 1995:24).

Starting from the modern way of life and work in today's industrialized and urbanized civilization, the working man is more and more present need for change of place of residence in spaces that are still clean and unpolluted in order to restore physical and mental stamina. (Стојмилов, 1992:5). Each participant in tourist movements, while wanting to satisfy their basic needs: accommodation and food, shows interest and other circumstances, such as the introduction of late, object, people, customs, habits, and more. Therefore, it needs carriers of tourist offer to pay special attention to leisure visitors i.e. the time that should be filled with various activities. These activities must be related to sports and recreation, cultural - entertaining activities, picnics and

walks, and many other activities that would lead to enrich the content of the tourist stay.

2. ENTREPRENEURSHIP CULTURAL-AMUSEMENT ANIMATION IN TOURISM

Cultural-amusement animation and animation program, by definition, are a variety of cultural and entertainment activities that content that motivate people to actively participate in them, which will meet their needs and desires on the one hand and increasing tourist consumption for entrepreneurs on the other side. Proceeding from the above, that cultural-amusement animation program is innovative and spiritually inspired tourist service, there is no question for some companies about the animation of the tourist services. It has created an innovative service that encourages increased consumption and experiences. The presented findings increase the importance of certain basic characteristics of enterprises in the tourism animation (Cerovic, 2008:167).

Entrepreneurship cultural-amusement animation tourism gets a new and important dimension in view of the importance of the tourism offer. Entrepreneurship is covering secondary place in creative ventures to increase perceptions where the main goal is a new service, innovative program satisfaction and experience with visitors and increase tourism consumption (Cerovic, 2003:78).

Since these are generally known facts, entrepreneurship can be defined as: business philosophy for success, or name of sense and action and introducing innovation and other achievements as progress for the entrepreneur (Dezeljin, Vujic, 1992).

Basically, all the settings for entrepreneurship have common features, all theories suggest that entrepreneurship can bind with certain undertakings, by appropriate means of capital, which is connected with uncertainty and risk for the implementation of animation program. Recognizing the entrepreneurship in cultural-amusement animation mainly in tourism as part of the tourist offer means entering innovation and experience and realization of the reasons for arrival of the visitors in a tourist destination or tourist facility. Successful entrepreneurship in cultural-amusement animation is certainly the best combination of talent, knowledge and skills of the entrepreneur, backed by capital is not crucial (Radisic, 1992:10-19).

One known theorist P.F. Drucker, defines entrepreneurship as a set of bold decisions that selects the future of the fundamental experiences of the past, but do not allow one to return to the past. Drucker states that "entrepreneurship is the ability to choose the right priorities for achieving the set goals."(Drucker, 1992: 82).

Priorities can be set with the following paragraphs:

1. To choose the future, not the past.

2. To focus on opportunities rather than problems.

3. To select their own direction, instead of blindly follow others.

4. The goal is to look high, always aims to more and what brings change, is not intended to already known.

Entrepreneurship can be defined as "maximization of opportunities", this is the standard work of the entrepreneur whose main task is to turn the normal course of operations and direct the implementation to the new opportunities and away from problems, renewed leadership to prevent the trend toward mediocrity, to prevent inertia and its swing towards new energy and new directions (Drucker, 1992:26).

Entrepreneurship is a resource development and resource of creating something new. Entrepreneurship is a resource that generates new resources (Sprica, 1992:11).

Entrepreneurship can be a resource that separates and moves to create something new, and never meet with existing (Weisberg, 1986:26).

Foundations of entrepreneurial travel companies include restlessness, dynamic pursuit of success, suspense, adventure, impatience, stridency, hard work, persistence, reality, assessment, skill, ability, motivation, morale and combat. Analyzing these important enterprises with particular reference to certain customers in the animations in tourism, it is difficult to precisely define entrepreneurship in tourism animation which should give necessary knowledge to entrepreneurial action, for entrepreneurship in tourism animation. Entrepreneurship in tourist cultural-amusement animation, is not occupation, but a mixture of different knowledge and skills of individuals-entrepreneurs who take animation work and create new employment ventures, which would increase tourist spending and generating new profits, with visitors should be satisfied with the offered animation program. Entrepreneurial skills are a natural gift, but such innate abilities can create and education.

Entrepreneurship in tourist animation is the ability to create resources and generating new cultural-amusement animation tourism program,

which verifies the market, and is reflected in the creation of new animation program, services, ideas or organizational form of supply of animation, its entrepreneurial spirit creates new tourism offer regardless of ownership of real capital (Cerovic, 2008:169).

One of the open questions when it comes to entrepreneurship, is the relationship between a property and entrepreneurship on the other hand, is not specifically defined in the tourist offer. According to some opinions, entrepreneurship in the tourist offer of cultural-amusement animation program it is difficult to imagine without private property that is "if there is no private property and free market, there would be no capital and entrepreneurship" (Kovac, B., 1989).

According to other opinions, "private property is not important for entrepreneurship i.e. private property is not necessary precondition for entrepreneurial behavior."(Bolcic, S., 1989).

The form of ownership is not a prerequisite for entrepreneurship, it is important to clearly identify the property, not the form in which it is located (Cerovic, 1994:41).

Entrepreneurship is important:

1. entrepreneurial idea;
2. risk taking by entrepreneurs to realize the idea;
3. The creation of new ideas, products, services or values;
4. defined property relations and taking some responsibility for obligations to equity (defining property, not a form of ownership).

Many theorists crushed thesis for entrepreneur as capital ownership, the same thesis to entrepreneurship has the same features private and public, economic and non-economic acquisitions, so and tourist enterprise which offers organized cultural-amusement animation program (Drucker, 1992:65).

It should be noted that ownership is important for entrepreneurship, especially in offering animation service. It does not have to be private, but the owner should be identified and legally regulated under the ownership is hierarchically superior category. In small tourist companies, usually the owner is also entrepreneur. However, with the growth and development of the company, the increase in the number of owners is coming to split not only the management but also the functions of entrepreneur owner. On this background, we can conclude that the owner can be an entrepreneur, but not necessarily, because among other things, this depends on the size of a company,

i.e. does it work for individual or corporate travel company. Any form of enterprise in all branches of the economy hardly independent on the concept of entrepreneurship, entrepreneur and property. The term entrepreneur can be applied to all those legal and physical entities that undertake certain business ventures, possess courage and are aware of the risk of taking uncertainty for certain investments, especially in tourist animation. Any travel company that deals with the organization and offer cultural-amusement animation program for the visitors it is needed entrepreneur (entrepreneurial spirit) resources and power that creates entrepreneurial initiative. In the perception of entrepreneurship inevitably companies create entrepreneurial term, the goal is always to every entrepreneur wants entrepreneurial investment results in entrepreneurial effect measured by income or profits. Starting from exported aspects about defining entrepreneur in tourist animation, can be defined as: "The entrepreneur is a person who buys and sells at a price that is more vague uncertain price." The entrepreneur is a creative person whose main goal is profits, creating new values, but in principle all be satisfied, and visitors and the community (pay taxes) and his associates and eventually the entrepreneur. From the above it follows that the entrepreneur in tourist animation is a person with an entrepreneurial spirit, which puts in a good use the available resources animation program and content, under threatening risk, takes animation deposit, which would create new animation programs and new experiences, services and ideas and thus create new pleasure of guests and new experience of tourist destinations or new experience a winning program and himself to create profit or profit (Cerovic, (2008:170).

In modern terms, mainly in the tourist offer, further questions arise: what is an entrepreneur and how to define precisely. Property is a prerequisite, but not a major requirement of the entrepreneur. The entrepreneur has an idea, is marked by uncertainty and ideas, entrepreneur finance his idea, but does not have to be the owner of the capital. He is a person who realizes his idea with the help of their own talent, knowledge, skill and ability, and no one guarantees success. He is a person who unites the functions of the property, the functions of creativity, entrepreneurship and the functions of the office manager (Sikavica and Novak, 1999:672).

Entrepreneur in tourist cultural-amusement animation is expressed as a responsible person full of capabilities, e leading figure of Animation Company, regardless of its size and structure, the main carrier of all technical, programmatic, procedural and other innovations and changes within the company. This description fully fits entrepreneur in tourist animation.

Entrepreneurs of animation companies or tourist hotel companies, mainly celebrities, authors of innovation, parties, games, recreation, animation and other tourist services and meet the creators of visitors and meeting their desires for the guest who came to defense tourist destination or hotel. Entrepreneur in tourist animation, it must be advocated, if it is to be successful, the following basic cultural-amusement animation activities (Crper, 1992:12):

1. Permanently increase the quality and introduce new animation programs;

2. Efficiency and introduce new cultural-amusement animation programs and encouraging animators for constant education and training;

3. Discovering the way for entering into a new cultural-amusement animation market, expanding market;

4. Introduction of a new form of organization and a model for resource management in cultural-amusement animation;

5. Exploring the new cultural-amusement animation potentials and opportunities that can be placed on the market animation program.

Entrepreneur in tourist culture-amusement animation is a creative person with an entrepreneurial spirit that is capable with its innovation and creation to meet the needs and motivations of the company as well as business partners. Entrepreneur of the tourist animation creates new resources for guests with different requirements and habits. With the aforementioned, the question how to organize, in which organizational structure is best organizes and implements animation program for the guest to be satisfied, and entrepreneurs to achieve the expected profit from increased tourist consumption.

3. CULTURAL-AMUSEMENT ANIMATION IN TOURISM

Culture as a civilization gain of highest range of values and identities appears in relation to tourism in two aspects: either as a culture in tourism or tourism of culture, i.e. as a "separate" tourist culture. The tourist culture, as a process of maturation and enrichment of tourism and its infrastructure should give tourism its own image, as well as programme and organizational maturity in all its segments that are based on the socio-cultural frame. Through permanent organizational actions, the tourist culture should develop: the culture of travel, the culture of stay, the business tourist culture, the tourist

culture of the receptive and emitting population, the tourist culture and education of the tourist workers (the tourist workers should be educated in the field of welcoming the guests and their transfer, hospitality, kindness, tourist hygiene, tourist bon ton, animation in tourism, permanent education and respect of the principles of the tourist and hospitality psychology, tourist propaganda and creation of a general tourist cultural ambient).

In the so called socio-cultural sphere and in the frames of the themes, challenges, collisions, big and small business tasks, that have positive and negative characteristics, the possible creative contributions, wanted redesigns and multiple initiatives and motivations, the tourist workers of different profiles, and especially the animators are being offered with various fields, contents, collaborations, activities and programmes of actions, while within the framework of the many various tourist activities, the so called animation proveniences. (Jadrešić, 1999:52).

Considering the fact that we are discussing the cultural-amusement animation, one question appears: Do the culture and the cultural-amusement animation activities get the rightful place that they really deserve? "The function of the culture in the recent projects for development of the tourist economy still hasn't gotten its rightful place here as it has in the tourist developed countries." (Nikolić, Sekulić, Petrović, 1994:31).

In the Macedonian tourist economy the consciousness for need of cultural-amusement animation as part of the tourist offer develops slowly, and the number of tourist places that have developed well organized animation is still small.

The analysis of the Macedonian tourist offer refer to an insufficient care for the content of the tourist stay, which stays behind that of the tourist developed countries. The insufficient representation of the organized animation affects the structure of visitors that come to our country, as well as the attractiveness of some offers. In that way, for example, The Republic of Macedonia hasn't succeeded in attracting many visitors during the short holidays. Actually, the so called mini-holidays require animation of the visitors during their short stay, with a particular attention to the cultural-animation content. Most often, this kind of tourist animation is handed to the foreign tour operators, while our representatives of the tourist activities are satisfied by offering their standard services. It can be stated that the animation should be a necessary, compact part of the Macedonian tourist offer because that is the only way that we can achieve the set goals, and in that way the visitors will get acquainted with the culture of our country in the widest sense.

Considering the fact that this notion is misinterpreted, this form of animation is sometimes related to a simple party or entertainment that can be conducted by whoever who has got a bit of a talent. This way of understanding degrades the function of the animation as a cultural activity, as well as the function of the animator as a tourist worker. In order to solve this unfavourable situation it is necessary to understand the notion of animation accurately, especially the cultural-amusement animation, as well as the animators. Thus, the animation should be conducted by professional animators.

For a successful animation of the visitors, the animator should conduct very complex, hard and dynamic tasks. The professional conduction of the tasks requires that the animator should have a complete personality. That means that they should have solid general education, but should also simultaneously be specialized in particular activities. They should also have sense for identifying the needs and preferences of the visitors as well as organizational skills. The animator should have such a relation to the visitors that they should be perceived as active members of the group. In the way, a nice psychological atmosphere should be created. Especially their mental, general and special competences should be pointed out. They should also have dynamically, initiatively, emotionally and socially mature personalities with a well developed sense of humanity and responsibility. (Бунташески, 2001:37). In order to have a successful animation, it should be conducted by all of the members of the hotel staff i.e. a team work is necessary, and the animator is an equal member of that team. "It is also necessary to point out that the animation shouldn't and mustn't be used to cover the deficiencies with reference to the quality of the services, because then it stops being an animation.

4. CULTURAL-AMUSEMENT ANIMATION PROGRAMMES

The fundamental goal of the cultural-amusement animation programmes is to attract a bigger number of visitors that are present in the tourist object/place. According to PhD Vinka Cetinski, there are three basic characteristics of the amusement programmes:

- they are most often realised in the evening;
- they engage many accomplices and guest-performers, and - the performances are public.

According to the same author the amusement programmes are divided into:

- amusement programmes in a narrower sense;

- amusement games and other programmes, and

- music programmes. (Cetinski, 1999:153).

According to us, the cultural-amusement animation programmes should be oriented towards the following contents: visits to the cultural-historic monuments, visits to the cultural-amusement performances/plays, painting, slot machine games, gambling, visit to the cinema, playing chess and similar games, visits to theatres, reading daily press, modelling and photographing, visits to folklore performances, listening to the radio, Miss contest, manufacturing or hobbies, gastronomic activities, etc.

Conclusion

If the cultural-amusement animation is treated from the aspect of the tourist offer, it should be treated as part of the tourist offer. It should be treated equally as the other services, such as accommodation and food. With the organization of various programmes, the cultural-amusement animation makes the tourist offer more complex, enriched and more competitive. Motivating the visitors for their active participation includes communication and personal contact with them, an insistence for better understanding of their preferences and needs as well as monitoring their satisfaction of the offered programmes. At the relation between the tourist offer and the tourist demand, the animation and especially the cultural-amusement animation is a mediator which should be seen in the promotion and improvement of the tourist demand in relation to the demands of the demand, in the informing of the visitors for the contents of the offer, as well as in motivating their interests for those contents. Through the accomplishment of the humanist functions it is possible to achieve positive economic results i.e. the overall tourist consumption is increased. All of this is provided by the cultural-amusement animation, which meets the various needs of the visitors. Through its programmes you can also acquire new knowledge and skills; you can increase your level of tourist culture, as well as acquire behaviours for an active tourist stay.

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DEALING WITH CHANGE RESSISTANCE

Abstract

The subject of the paper is the change resistance and dealing with it. In term of globalization, the environment is changeable and the companies must answer to these changes with changes inside them. The employees at the beginning of the each change, resist the new condition and changes. Because of that it is very important to learn how to deal with this.

At the beginning of the paper the barriers of changes are presented. The types of sources of change resistance are analyzed. The characteristics of individual and organizational sources of change resistance should be taken in consideration. After that, the frame for overcoming the resistance to change is explored.

From many different strategies, six strategies for overcoming the barriers of changes are specially analyzed: aligning with needs and costumer goals, communication and training, participation and inclusion, threats and coercion, creating change teams and creating of idea champion.

The aim of this paper is to show the great importance of learning how to overcome change resistance and easier accept and adapt to the changes. With faster adjustment to the new challenges, the companies will be more competitive and will save needed energy.

In order to achieve the aim of the research, the methods of induction, deduction, synthesis of systematic analyses, comparison, as well as combination of qualitative and quantitative analyses of the results have been used.

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Key words: changes, barriers for change, change resistance, strategy for overcoming the change resistance.

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Introduction

Companies constantly face pressures to change. The real world is turbulent and requires organizations and their members to undergo dynamic change if they are to perform at competitive levels (Balogun, J. and Hope Haily, V. (2004). Because of increasing of its importance the management of changes should be the main field of exploring in this paper, because the changes are a basic characteristic of contemporary organizations.

In the paper changes will be explored from another perspective. On the other side are the employees who must get used to the new tasks, develop the new skills, new transfers, be rewarded or retired. Also the individual and organizational barriers for change are analyzed.

Managers should aim their interests towards spreading their knowledge about management of change in order to be able to anticipate the needs for change and prepare for it. The changes need to be explored and analyzed from all aspects and actually that is the way in which we can manage them.

The paper shows why people and organizations often resist change and how this resistance can be overcome. Various instruments for overcoming the change resistance are presented and reviewed.

1. INDIVIDUAL AND ORGANIZATIONAL SOURCES OF CHANGE RESISTANCE

On the beginning for better understanding the change resistance, the sources of change resistance are explored. With better knowledge of the reasons, the managers will be able to help the employees who are concerned what will happen after the changes. Also, this is very important for avoiding the creation of employees who will base their tasks on avoid the changes.

For the analytical procedure we will group sources of change resistance into two groups, individual and organizational. The analysis shows that in reality they are somewhere between the two groups.

The individual sources of resistance of changes are in the main human characteristics like perception, wishes and needs.

In the Table1 bellow, the individual sources are presented:

Table 1: Characteristic of individual sources of change resistance

Individual source	Characteristics
Habit	People are usually used to making things in the same way
Security	The employees with greater needs for security show bigger change resistance
Economy factors	This resistance occurs when the salary is closely related to productivity
Fear of the unknown	The unknown, instead of routine daily steps causes fear
Demographic reasons	The younger employees accept the changes more easily
Selective information process	The employees accept only the information what they want to hear. Rejecting the other information can be source of resistance.

Source: Stephen P. Robbins, (2003), "*Organizational Behavior*": 559

The main characteristics of the analysis of the individual sources are shortly explained.

Habit as a source of resistance to change. Every day when we go to work, we use the same route through the same streets. Most people behave that way. As human beings we are creations of habit.[2] The life is very complex and people have no need to think about all the possibilities for the hundreds of

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decisions which we make daily. For facing with that complexity usually we rely on the habit and on the programmed responses. But, when we face changes, the tendency to respond in the usual way becomes a barrier for changes.

Security as a source of change resistance. The people with big needs for security present bigger change resistance because their feeling of security is threatened. So, for an example, when new equipment is implemented, the old partners are concerned.

Economy factors as a source of change resistance. Another source of individual resistance is the concern that the changes will cut earnings. The changes in the working tasks or implementing the new working routine can cause fear.

The fear of unknown as a source of change resistance. Changes are replacement of the known with ambiguity and uncertainty. The changes of well known conditions create an unknown condition which very often can be rejected. For example, implementing the total quality management, TQM, means that the employees must learn statistical techniques for quality control and somebody can be afraid that he will not respond to this request. Because of that negative views for TQM are developed.

Also, with the changes in the organizational scheme in many organizations the fear of the unknown is felt. That causes resistance because the employees don't know where they will be with the new changes and if they will be regularly paid.

Demographic structure as a source of resistance to change. Researches show that the acceptance of changes depends on the composition of employees. The younger and more educated employees accept the changes more easily. They can easier adapt to the changes and are more willing to learn new things.

The selective process of information as a source of change resistance. As we know, the individuals live their lives through their perceptions. Once created that world is barrier for changes. So, the individuals are responsible for a selective information process that fits their perception. They hear only what they want to hear. They ignore the information that challenge the world what they were created.

The reason for the organizational barriers for changes can be found in the organizations inert nature. The main types of organizational sources of change resistance are systematized in the Table.2 above:

Table 2: Characteristic of organizational sources of change resistance

Organizational sources	Characteristics
Structural inertness	Organizations are usually designed to promote stability
Limited focus on the changes	The changes inside the subsystems are with tendency to be neglected.
Inertness of working group	This resistance occurs in the social groups
The need of new expertise	The new expertise can be a reason for resistance
The need of new power relations	The new power distribution between organization parts can be organizational source of resistance
The need of reallocation of the resources	The new allocation of resources can be reason for change resistance
A previous unsuccessful effort for change	Everybody who survived the previous failure, surely will manifested the resistance to do the same thing
The composition of Managerial board	The Managerial Board is the group who make the organization politic and the change resistance depends on their structure

Source: Stephen P. Robbins, (2003), "*Organizational Behavior*": 561

The analyze of the main characteristics of the organizational sources of resistance are discussed in addition:

Structural inertness. Organizations are designed to promote stability. The forces which influence the individual results of working are strongly determined and have structural inertia. Is very hard to overhead the change resistance created from forces of stability. For example, the selection process systematically selects secure people, and rejects the uncertain ones. The trainings and other techniques of socialization force the specific requests and skills. The formalization reserves the description of work, roles and procedures which employees should follow. The employees engaged in an organization should adapt to the organizational roles, because that is expected.

The limited focus on the changes. The organizations are created from many independent subsystems. We cannot change a part of them without its reflection to other parts.[3] So, for an example, if the management changes the technology process without modifying the organizational structure and culture in the same time, the changes of technology will not be accepted voluntary. The changes only in one subsystem are with a tendency to be neglected from the bigger system.

Inertness of working groups. It can be noted that the inertness to continue working on a specific way stems not only from work nature, but also from social groups in organizations. Because of the strong social norm in groups, there is a pressure for realizing the work in a concrete way. The implementation of changes undermines the expectations and lead to resistance. When the individuals want to change their environment, it can happen that the group norms act as barriers for changes.

The need of new expertise. The changes in the organizational style can ask for an expertise of a special group. Implementing the new changes often asks for new knowledge and expertise. The employees who don't have this knowledge show this type of resistance.

The need of new power relations. During the changes also the change of power distribution between the individuals and organizational departments occurs. The departments which have control of the power are concerned that they will lose the power and the position because of organizational changes. Different distribution of decision making can require long establishment of power relations inside the organization.

The need for reallocation of resources. The groups who control a big number of resources usually note the need for change. Implementing the changes can mean budget reduction or reducing the number of employees. That means that many changes will ask for changes in allocation of power.

A previous unsuccessful effort for change. The groups in organizations which were unsuccessful in implementing the changes in the past, can be suspicious and reject the attempts for implementing the changes in the systems.

The composition of Managerial board. When this body consists of many members it makes smaller changes than when it consists from few members. A managerial board where the members come from various areas initiates less change, than when the members come from the same professional area.

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[3] V.D.Kondalkar, (2007), "Organizational Behavioral", New Age International (P) Limited, Publishers, 30-33.

2. STRATEGIES FOR OVERCOMING THE CHANGE RESISTANCE

In this part of the Paper we pay attention on the possibilities of coping with change resistance. From many strategies, the following six strategies for overcoming the change resistance are explored:[4]

- Aligning with the needs and goals of consumers;
- Communication and training;
- Participation and inclusion;
- Threats and coercion;
- Creating change teams;
- Creating an idea champion.

Aligning with needs and goals of consumers. The best strategy for overcoming the change resistance is to ensure that with change we will satisfy the real need. Often the change initiators don't consult with the employees who will use the changes, so the resistance occurs. In the process of overcoming the resistance it should be shown that the changes are good for the consumers.

Communication and training. The change barriers can be reduced by communicating with the employees. With communication the employees will be able to perceive the change logic. This tactic predicts that the source of resistance is in the misinformation and poor communication. If the employees receive all the facts and all the misinformation are cleaned, the resistance will be prevented. [5]

Communication can be reached with one-to–one discussions, notes, group presentations or reviews. It will produce effects only if the source of change resistance is in inadequate communication. In this case the relations will be characterized with changing trust and belief among employees and managers. If these conditions do not exist, there is a small possibility that the changes will be successful.

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[4] B. Gjorjijovski and D. Bojadzioski, (2003), "The Theory of Organization", Economy Faculty, Skopje: 411

[5] Tricia S. Cabrey, Amy Haughey, (2014),"Enabling Organizational Change Through Strategic Initiatives", PMI's Pulse of the Profession In-Depth Report, 9.

Participation and inclusion. Analyses show that for individuals it is difficult to oppose the decisions in which they participated.[6] The self-confidence that they were included in making an important decision can reduce the change barriers. The lack of employees' participation in decision making is a reason for poor decision making and long duration of their realization.

Threats and coercion. This strategy is the last instrument on the list. This is using the direct method of power to the employees who resist the change. In a case when the corporative management really must implement some production plan, but the employees are unruly to accept this, the power will be an instrument which will be used. Other cases of coercion are the threats of transfers, loss of promotions or negative results of working.

Creating change teams. Forming creative sectors, new risk groups, task groups are ways of focusing the energy in creating and implementation of changes.

Encouraging the idea champion. The idea champion is one of the most effective tools in dealing with change resistance. They are strongly connected to their idea and can convince the employees to implement the idea, even by using power, if is necessary. The technical and management champions go ahead even when nobody believes in them. The experience shows that their enthusiasm pays off.

3. THE TACTICS FOR OVERCOMING THE CHANGE RESISTANCE

Apart from the analyzed strategies, the change agents also use some tactics for dealing with change resistance. In this part of the paper the most used tactics for overcoming the change resistance are observed: facilitate and support, negotiation, manipulation and collaboration.

The main issues of the tactics for overcoming the change resistance are explored as follows:

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[6] Matt Barnard, Naomi Stoll, (2010), "Organisational Change Management": A rapid literature review, Short Policy Report No. 10/01, Centre for Understanding Behaviour Change: 3-10, [http://www.bristol.ac.uk/medialibrary/sites/cubec/migrated/documents/pr1.pdf]

Facilitate and support

The change agents can offer space for supporting effort for reducing the change resistance. When the employees feel the fear and indifference is high, they go to the consulting and training of new skills. The flaw of this tactic is the time of its acceptance. The expensive side of this tactic is not a warranty for success.

Negotiation

Another option available to the change agents for dealing with change resistance is to give something in exchange for reducing the resistance. For example if the resistance is concentrated in a few powerful individuals, specific packets of rewards can be negotiated to meet their individual requirements. The negotiation as tactic can be necessary when the resistance comes from powerful source. But the high |costs cannot be ignored. In addition, a risk exist that some agent who negotiated with some group for overcoming the change resistance, became a possible object of blackmail from another individuals in power position.

Manipulation and collaboration

This method means that the hidden influences will attack. Twisted and distorted facts will seem more attractive. With holding the unwanted information the wrong rumors will be created to make the employees accept changes as examples of manipulations. If the corporative management threatens to close particular parts from production or these parts fail, and these information are not really correct, the management uses manipulation.

The collaboration from another side is a form of common manipulation and participation. That means winning the leaders of the group over by giving them the main role in making the decisions related to the changes.

The leader's proposal is seemingly better, but only until they get their consent. The manipulation and collaboration together are relatively cheap and easy ways of getting the support and agreement. It is possible that this tactic turns against if the goal becomes aware that they were used. Once they discover that a manipulation has been done, the credibility of the change agent is doubtful.

4. MANUAL FOR OVERCOMING THE CHANGE RESISTANCE

The managers must pay attention at concerning of employees related to the changes. They must give the basic information to the individuals about the changes. Employees must be introduced how the changes will reflect to their vital interests.[7] With various techniques will facilitate the assessment of problems about designing of work during the change process. That would be the process through the employees will start to think about the new situation on the constructive way.

The findings from the research can be shown as a manual for overcoming the change resistance: The main issues were grouped in the four groups: analyzing and introducing myself, introducing the situation, another who can help and working to rise the self confidence. These explored issues are presented in the Table3:

[7] Stephen P. Robbins, Timothy A. Judge, (2013), "*Organizational Behavioral*", Pearson Education, Inc., publishing as Prentice Hall: 339.

Table3: The main issues for clarifying the open points

Issues	Discussion
Analyzing and introducing myself	Did I choose what happened? Should I accept the changes? Can I profit from the changes? What damage can happen to me? Do I know what I want? Which skills and abilities do I possess? How do I plan to develop the new abilities? Have I experienced similar changes? How do I plan to fight? Am I taking the initiative? Can I deal with stress? Am I able to deal with conflict? Can I avoid the conflict? How successfully do I manage my time? Do I reproach myself? Am I ready for changes and how will I feel because of the changes? Do I expect that others in the company will handle these questions?
Introduce the situation	Can I describe the situation? Can I explain the new system? What can I say for the working environment? Can I explain why the changes are necessary? How do I expect to behave? Which standard of performance is required? Who will work with them? Who will report about them? Who will be responsible for them? Can I reject the previous system? Can I experiment with the new system? Can I learn from tests and errors?
Introducing another who can help	Can somebody help me? If I speak with family, friends or colleagues? With managers? With somebody independent?
Working to rise the self confidence	Test our ideas and beliefs. Talking loudly with myself about open questions. Forgetting the past. Defining the goals and activities for benefits

Also, should be pointed out that must be good communication between managers and employees for clear explanation of need of changes. Here should be taken into the errors in communication that occur between sender and receiver and in communication channels.

The managers must be sure that there is enough time and place for sensing and feeling the changes. The discussion presents the exploration of issues and points that need to be faced and the ways in which we can deal. With these issues, presented in the Table 3, we can define the base for series workshops for employees who will be included in changes programs.

On the end we can systematize the main benefits from the research. These can be presented as a guide for overcoming the change resistance shown in the Table 4:

Table 4 Instruments for overcoming the change resistance

Instrument	Steps
Strong political dynamics	Convincing the employee to have the same vision with the leader.
Education of working force	With education of working force, the fear can be reduced, when it is clarified what the changes mean
Employee involvement in change planning	The employees who are involved in the change process and are informed, understand the need for help better and defy the changes much less.
Rewarding the constructive behavior	The changes are accepted more easily if the employees are rewarded for their constructive behavior

With using the recommended steps in the Table 4 for overcoming the change resistance and realizing the changes, significant energy in support of change will be released. The organizations will become more receptive to overall change and more effective.

Conclusion

In globalization terms, the organizations must change themselves daily. It can be concluded that one of the main roles of the managers is to overcome the change resistance. It is in the human nature to be inert and do the known things.

The managers must analyze all possible sources of the change resistance and pay attention on clarifying the motives and reasons for change to the employees.

This paper contributes to easing the process of implementation of changes for the employees. We can conclude that a deep analysis of the sources of change resistance is very important. The individual and organizational sources of change resistance must be explored in the concrete situation with each employee. This is a complex analysis which must take all factors in consideration. From the paper can be concluded that the analysis of sources of change resistance would save energy in the later phases of change process. After this, the managers must also know all available instruments and mechanisms for overcoming the change resistance. After the analysis is done, the strategy and instruments will be chosen. We can conclude, that the time spend explaining and discussing in the beginning is not lost. Paper shows the main issues in clarifying the open points regarding the overcoming the change resistance. This is why many workshops for accepting the reasons for changes need to be organized. Reducing change resistance will facilitate the change implementation. Systematic approach for handling change resistance results with a more effective company.

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INFORMAL COMPETENCIES FOR EMPLOYMENT AND ENTREPRENEURSHIP – CONDITIONS AND OPPORTUNITIES FOR MACEDONIA

Abstract

Entrepreneurial learning is defined as learning activity throughout life, with the aim of improving knowledge, skills and abilities to the personal, civic, social and business perspectives. In order to successful society transition andeconomy based on knowledgebe possible, the guiding principle of the whole concept of learning and acquiring knowledge should be based on the process of entrepreneurial learning.

Macedonia is a small and open economy, and it's constantly developing various policies and measures in line to improve it's competitiveness. Highly focused to become recognizable country with a favorable business climate, Macedonia faces many complex and limiting factors. The need of entrepreneurial learning and development of professional competencies as a condition of employment or career development is one of them. The aim is to identify the main problems caused by lack of this value, adding employment opportunity and plaid employee development. The analysis was conducted among existing certification systems of enterprising and professional competence in some European countries and strategies of action regarding Macedonia.

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Key words*: entrepreneurial learning; employment, entrepreneurship; informal and non-formal learning; competences;*

JEL classification: **L21, L28, M51**

Introduction

Entrepreneurial learning is one of the priorities in the informal and non-formal education. Here we can find types of education and training that are not part of formal education, but can bring more learning possibilities for the people of Macedonia regardless of their age – this is an integral part of the overall eco structure strategy. "Formal learning is always organised and structured, and has learning objectives. From the learners' point of view, it is always intentional: i.e. the learners' explicit objective is to gain knowledge, skills and/or competences. Informal learning is rarely structured, has no set objective in terms of learning outcomes and is almost never intentional. Often it is referred to as learning by experience or simply as experience. Mid-way between the first two, non-formal learning is the concept on which there is the least consensus, which is not to say that there is consensus on the other two, simply that the wide variety of approaches in this case makes consensus even more difficult. Nevertheless, for the majority of authors, it seems clear that non-formal learning is rather organised and can have learning objectives. The advantage of the intermediate concept lies in the fact that such learning may occur at the initiative of the individual but also happens as a by-product of more organised activities, whether or not the activities have learning objectives. In some countries, the entire sector of adult learning falls under non-formal learning; in others, most adult learning is formal. Non-formal learning therefore gives some flexibility between formal and informal learning, which must be strictly defined to be operational, by being mutually exclusive, and avoid overlap" (OECD, 2010).

Informal and non-formal education is the best way to build opportunities for adult people to join in the process of entrepreneurial learning such as those who lose their jobs, and also persons that have a beneficial pension. Also, here are the individuals who are expanding their views learning by themselves, for example on the job or during their free time. Informal and non-formal education should support development of number of competences that will allow individuals to increase:

-life-long learning capacities,

- specific competences related to type of industry/sector or hobby,

- networking opportunities,

- resources utilization,

- new technology utilization,

- novel opportunities and new career options,

- follow-up activities to increase the implementation of what is learned,

All these aspects will encourage a proactive approach to self-employment and economic independence.

LITERATURE REVIEW

Peter Drucker, one of the leading thinkers in Entrepreneurship, said: "The secret of entrepreneurship is not magic, it's no secret, and it has nothing to do with genes. It is a discipline. Like all other disciplines, it can be learned"(Drucker, 1985).

According to D. F. Kuratko, one of the most comprehensive empirical analysis of entrepreneurial learning was conducted by Solomon, Duffy Tarabishy (2002) in his review of entrepreneurial learning, Solomon argues that the main point of the entrepreneurial learning is that it is different from the typical, formal business education (Kuratko, 2005).

These studies have demonstrated the importance of "experiential learning" in terms of learning from the literature.

According to their reports the teaching aidsare the following:

- business plans (Gartner and Vesper, 1994);
- undertakings (Truell, Webster and Davidson, 1998);
- consultation with real entrepreneurs, talks with entrepreneurs and analysis environment (Solomon et al, 1994.);
- mathematical simulations (Brawer, 1997);
- behavioral simulation (Stumpf et al, 1991);
- studies (Gartner and Vesper, 1994);
- site visits, video and film recordings (Klatt, 1988).

These components of entrepreneurship reflect the competencies of the entrepreneurs.The term "entrepreneurial skills" finds its place in the literature in entrepreneurship. In the past 20 years various authors identify a number of skills, knowledge and experience key to entrepreneurial success. So while Murray (1996) have limited entrepreneurial skills of personal experience of entrepreneurs, Man et al (2002) also emphasizes the category of leadership.

Basu and Goswami (1999) see entrepreneurial competencies as socio-cultural factors, and Martin and Staines (1994), as a personal quality. Finally, Mitton (1989) with arguments shows that entrepreneurial competencies that have the characteristics of behavior, as opposed to Florén (2006), who believes that the most important skills of the entrepreneur time management Moreover, the European Qualifications Framework (EQF) and the studies the impact of entrepreneurship programs in higher education, by 2012, the European Commission said that the key to entrepreneurial competence "consists of knowledge about entrepreneurship, entrepreneurial skills, entrepreneurial attitude." Different competencies are classified into each of these categories. the EQF "competencies in the narrow sense means a proven ability to use knowledge, skills and personal, social and / or methodological skills for work or study situations and in professional and personal development. "

Finally, excellent additional link between education, entrepreneurship and employment give Ronstadt in 1987 when he proposed a model with dual continuum design created educational training for entrepreneurial learning. His second continuum calls "entrepreneurial know-how / entrepreneurial know-who." This is a continuum based on the belief that business success depends not only knowledge, but also the network of individuals that is connected entrepreneurs. Ronstadt (1987) suggests that an effective program must show learners how to apply entrepreneurial, but also to introduce them to people who could provide support and success. But according to him, educational programs and training are not the only or preferred way of gaining entrepreneurial knowledge.

Different forms of entrepreneurial learning (formal, informal, non-formal) cannot be reviewed in isolation from one's lifetime, but they should be perceived as a parallel that complements lifelong competences, or as a "Mixture of learning" (Rauschenbach, et al., 2004). Although this learning mix is not recognized sufficiently in practice, it is the importance of other, non-formal places of learning that has increasingly been the main focus of attention. (Rauschenbach, 2007, pp. 439-453)

The non-formal places of entrepreneurial learning that are different from the formal ones, have several significant advantages. Regarding the fact

that they are non-formal, and that non-formal learning in the context of the world is a necessity of the population in real life, all people can constantly develop their own learning and skills. The flexibility of the individuality of learning situations enables entry for a large number of people that live in the reality of changes and needs, thus understanding the need of the unconventional biographies of learning (Reichenbach, 2007).

In order to support the meaning of the above stated, we hereby state the definitions of the European commission of informal and non-formal learning.

NON-FORMAL LEARNING

"Learning, that does not take place in general education or vocational schools, and which is not usually certified. At the sametime, it is systematic (regarding the goals, duration and learning resources), and from the learner's point of view it is often directed toward a certain goal". (Reischmann, 2004)

Non-formal learning, regarding the education of adults, concerns all contexts of learning, that are not externally (formally) planned, but are directed and conscious from the learner's point of view, and enable acquiring of knowledge. In order to keep up with the current knowledge during one's professional upgrade, having discussions with coworkers and solving professional problems together, reading expert publications, attending seminars and conferences, are undertaken as a foregone ongoing process of non-formal entrepreneurial learning.

INFORMAL LEARNING

"It is a form of learning that takes place in everyday life, the work place, the circle of family, or during vacation. It is not (regarding the goals of learning, the time of learning or the incentive) structured and usually it is not certified. The informal learning can be directed, but in most cases, it is unconscious or unintentional" (Commission, 2001, p. 33).

This affects primarily individuality: constant new impressions, impulses and experiences, in order to develop personal judgment and attitude. This enables individuals to "establish themselves in the living and

working environment and in front of other people with their own opinion and conscience" (Commission, 2001, p. 35).

Therefore, the informal and non-formal learning are forms of self-organized learning. In the last few years, the educational debate in formal and non-formal part has been strongly shaped by the idea of competence. The reasons of such development are primarily the changes regarding the knowledge in the "postmodern world". For example, in the field of information technology, the level of knowledge of the individuals, in many subject areas, has a limited reliability. That is why owning competences, which enables acting in unusual situations and using new information as well, is more and more important.

At the same time, the period of the individualization of society, learning, and education highlights the responsibility of the individual. (Pries, n.d.) The importance of "soft skills" and interdisciplinary qualifications in this context is constantly increasing. (Lipski, 2004)

In order to confirm the education of the individual, until recently the term "knowledge" and the research to what extent the skills and knowledge can be reproduced were in the centre of attention. (Reichenbach, 2007)

From the middle of the previous century onward, other aspects of the original goal set by foundations, such as the ability for critical thinking, problem solving skills and the ability to cooperate, have gradually been included in the debate on education politics. (Tully, 2004)

This development continues in the 80s and, therefore, terms like "transferable key qualifications" or concepts like "to learn how to learn" become more and more popular. "This trend has finally been improved by the testing of programs of OECD which deal with the so-called "life skills", which should enable people to cope with the modern and future demands, the everyday demands in the private and professional life, both as citizens and employees, and regarding further lifelong learning". (Klieme, 2004, pp. 10-13)

Meanwhile, "development of competency" has become the central concept in the international debate of education. The ministers of education of OECD (2001) consider the development of competences crucial for the society based on knowledge.

"Our goal consists of the fact that we will enable all citizens to acquire competences - as basic qualifications and assumptions for further learning, and personal and social competencies, which are necessary for the participation in society based on knowledge". (Kaiser, 2007, p. 11)

If the non-formal and informal learning are reviewed in the context of education for adults on the one hand, and as an aspect of professional development on the other hand, the personal responsibility and the responsibility towards the organization itself acquire immense meaning.

"Non-formal learning is characterized by the fact that the individual, based on the approach to the problem or interest, which he himself has set, and which he considers relevant, sets goals (learning), the realization of which requires him to develop a working plan, or learning activities, to implement them independently, while deciding how to deal with the difficulties that will arise, and to finally confirm when he will consider the adopted competences favorable for realization of the learning goal". (Commission, 2001, p. 3)

METHODOLOGY AND RESEARCH FRAME

The research includes identifying key topical areas for those who want to validate their acquired entrepreneurial skills for employment purposes or for personal career advancement in some European countries and the challenges that the people meet in Macedonia. Furthermore, the paper presents the priority areas and long-term goals provided for the period 2018 - 2020 year by the European Commission to increase the level of awareness among citizens about the significance and importance of entrepreneurship education at all levels in the country. Research and analysis of the mentioned documents and allows states to recognize the specific problems encountered by persons wishing to acquire or have acquired entrepreneurial skills while opening a small business or developing it.

All types of transformations are covered with different types of challenges that often can be very limiting factors in ensuring successful implementation of strategic documents. So, the same is the case with this strategic document. Because of that it is important to build strong ability

to face challenges with a constructive approach from the start to ensure successful implementation of the entrepreneurial learning strategy.

The biggest challenges to the success of this strategic document for entrepreneurial learning in the Macedonia will be the following, presented in descending priority order:

- Ensuring support from all stakeholders responsible in the implementation of entrepreneurial learning strategy in Macedonia. Important challenge that this strategy will also need to address is ensuring enough support from everyone in the process of implementation. It is not only about the formal and in-formal/non-formal educational institutions and policy makers, but there will be high need for building collaborative environment, in which all parts from formal, non-formal and informal education will collaborate in creating better future. Also, involvement and commitment of enterprises to participate in relevant activities of the EL strategy will be one of the most important factors for the successful implementation.

- Limited financial resources, human resources and time. As always limited financial resources, but also human resources can become one of the biggest obstacles in successful implementation of the strategy. Other challenge is the persons that will be on the first line in the implementing this strategy, that also will need to exert more efforts that will ask additional time from them.

- Creating flexible education especially in the fields related to entrepreneurial learning with the connection of other learning subjects in formal, non-formal and informal education. This is one important challenge because the main purpose of the curriculum will have to succeed in preparing the persons for the jobs that not yet exist on the market. Flexible curriculum will avoid high level of current generalization of educational system in their span creating knowledge about everything for everyone, so it will contribute in the creation of the skilled people prepared for the future jobs that even not exist today.

- Building high level awareness from interested persons and all parties in the process ofentrepreneurial learning in the Republic of Macedonia. Because of that one of the challenges of this strategy is to build really high level of awareness from interested in entrepreneurial learning and local and national community that will have supportive role in the entrepreneurial learning process.

- Creating training programs that will reflect the real needs of today's and future markets. Teacher development is one of the most important pillars

of the strategy, and as something like that creating training program that will ensure successful implementation of the strategy is additional challenge.

- Involvement and commitment of enterprises to participate in relevant activities of the ELstrategy. Direct involvement of the companies in the educational process is the key for successful implementation of the strategy. (2014, p.21)

PRIORITY AREAS

The high priority areas for the entrepreneurial learning strategy in the Republic of Macedonia are located in five main pillars elaborated bellow, while technology and good practices are the drivers of the strategy that will increase overall EL awareness and will results in reforms and continuous на service providers development. All of these are the preconditions for achieving an EL strategy vision - to ensure sustainable economic development and prosperity of Macedonia and Macedonia to become a country with highly developed entrepreneurial culture and spirit that inspires everyone. (2014, p.32)

Entrepreneurs, current and potential,are important components of this entrepreneurial learning strategy. The success of entrepreneurs will mean the success of the implementation of the strategy. The main focus of the strategy is on young entrepreneurs and on the conditions and environment needed for their successful growth. This pillar of strategy should ensure entrepreneurs to strength their capacities for:

- Expanding current developed hard skills
- Opportunity-seeking and initiative taking
- Utilizing technologies, innovation and new products development
- Persistence
- Demand for quality and efficiency
- Calculated risk-taking
- Systematic planning, goal-setting and monitoring
- Persuasion and networking
- Independence and self-confidence

- Fund-raising
- Internationalization of their work (2014, p.33)

The table below shows the importance of raising people's awareness for this type of acquisition forentrepreneurial competencies.

Increase the level of awareness among all citizens about the meaning and importance of entrepreneurial learning at all levels in the country:

Table 1: Long-term Goals: 2018 - 2020

ISCED 0-1-2	ISCED 3-4	ISCED 5-6	In-formal/Non-Formal	Entrepreneurs
Priorities/Actions	**Responsibilities**	**Time frame**	**Impact**	
To build entrepreneurial aware society	All stakeholders	Long-term	Environment in which exist clear understanding of the real meaning of entrepreneurial learning with right understanding of importance of entrepreneurial learning.	
To include all stakeholders to became active part of EL process at all educational processes in the country	MoS, local Government, Educational Institutions	Long-term	More stakeholders around educational organizations will become active part of entrepreneurial learning process.	

European Commission; Cedefop; ICF International (2014*).European inventory on validation of non-formal and informal learning 2014. Executive summary.*

Conclusion

The analyzed experiences for validation of non-formal and informal entrepreneurial learning in some of the states of EU reveal that the national contexts of the states could be very heterogenic regarding the different characteristics of validation, in terms of levels of identification, evaluation and certification, but also the stadium of development of the process, even in the use of different meaning of the terms in different states.

But, the imposed continuous need, and the foregone development of these types of individual entrepreneural learning for pursuing needs and problems, will unconditionally initiate permanent upgrades of the systems and law frameworks. The exchange of experience, especially with the states with longer history from the one of Macedonia, will significantly contribute to increasing the efficiency of this system of validation.

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