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Dear reader,

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On the path of development of the economic thought and building a wide network of research and professional cooperation with other countries in the world, we set new goals, criteria and challenges in order to improve the journal's quality. In this regard, during 2010 and 2011, significant changes have been made in editorial policy, design and its availability to broader academic and professional public in the region and worldwide. As result of all this changes, starting from no. 3/2010 "Economic Development" will shift into international journal, will be published in English language and will be distributed in all countries of the region and worldwide.

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prof. Biljana Angelova, PhD
Editor-in-chief

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Original scientific paper

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ECONOMIC IMPACTS OF THE EXCISE LEGISLATION ALIGNMENT OF THE REPUBLIC OF MACEDONIA AND THE EU DIRECTIVES

Abstract

The creation of the European Union was led by the processes of economic integration, in which the European countries promote the economic cooperation, first, by sectorial liberalization of certain products and by establishment of free trade zones, up to the unification of the economic and monetary policies and the establishment of the economic and monetary union. The crucial factor on the road towards higher stages of economic integration, which have allowed building of a common economic policies and deepening the process of economic integration, was the establishment of a customs union. Due to the customs union the application of numerous economic policies, including the excise policy, was made possible, thus creating equal economic conditions for all European business organizations of the single market.

In this context, and in order to establish the expected effects of Macedonia's membership in the EU in terms of changes in the excise system, this paper studies the forms of economic integration and economic benefits of their creation, the excise system and excise policy

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the EU, as well as the expected effects of the adjustment of the excise system of the Republic of Macedonia with EU directives.

Keywords: custom union, excises, legislative, negotiations, energy resources.

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Introduction

The topic of the paper covers the harmonization of excise legislation of the Republic of Macedonia with the *acquis communautaire* and future challenges of its membership in the European Union. On the road to membership in the European Union, Republic of Macedonia needs to harmonize its national legislation with the legislation of the European Union, which is one of the basic conditions for entering in this regional integration. Republic of Macedonia in the past decade actively worked on the harmonization of national legislation with excise *acquis-EU*, and it has achieved a high degree of compliance. However, the challenges in this area do not end here; rather they still continue with the initiation of the process of negotiations for its full membership in the European Union. The integration of the Republic of Macedonia in the European Union will instigate significant changes in several segments of indirect taxation, where it is very important to change the excise burden and its leveling with the prescribed minimum by *acquis* of the EU, hence, we can perceive relevance and importance of the topic elaborated in this paper.

The analogy of the foregoing subject of research of this paper is excise legislation in the European Union, the amount of prescribed and applied rates of excise duties, as well as the national legislation in the field of excise and its alignment with the *acquis communautaire*, which is a function of future economic challenges that the Republic of Macedonia will face with its membership in the European Union.

1. Systematic regulations in the field of excise legislation in the European Union

In terms of the excise duties harmonization, it is important to point out that the European Union has achieved only minimal agreements regarding the minimum tax burden, due to the systemic directives which govern this area - only the minimum amount of tax is provided. Although the processes of excise duties harmonization have started in the early 70's, there is no common solution that will enable the same level of taxation for all member states. Regarding this, each member state determines the amount of excise by itself, above the minimum which is regulated with the systematic directives. The main reasons for this situation are the divergent views of the member states regarding certain goods and the amount of the specific excise duty. For example, if for France the wine is strategically important product for which there should not be high excise, Germany would have a different attitude towards wine, because for Germany the beer is more important. In this context, if we take into account the accession of new member states, the process of alignment and determination of appropriate level of taxation is getting more complicated.

An alcoholic beverage - the harmonization of the specific excise duties of the alcoholic drinks, which include the beer and the wine, started in the early 70's and is still going on. The excises of the alcoholic beverages are determined by fixed amounts, and are in accordance with the Council Directive 92/84 / EEC, which is still in force. These amounts, since the adoption of this Directive from 19 October 1992 have not been changed, even though Article 8 provides audit of the excise every two years starting from December 31, 1994. Considering the way of making decisions regarding the indirect taxes, which requires consensus by all member states in the Council, the change of the prescribed minimum excise is very difficult. Because there is no synchronization of the excise duties as an absolute amount with the amount of inflation, they are losing their primary significance as fiscal revenue. Every member state autonomously increases the excise taxes on alcohol and alcohol drinks in accordance with their national needs, so that since 1996 the EU-15 member states have an average rate of 1 liter of alcohol of 8.2 euros, which is four times higher than the specified minimum average of 2.2 euros.

During 2006, in order to revalue the minimum excise on alcohol and alcoholic drinks and to recover their meaning as in 1992, a proposal by the European Commission was prepared, which anticipated increase in the excise duties on alcohol and alcoholic beverages by the following amount:

- 31% for beer (from 1.87 EUR per hectoliter to 2.45 euros);
- 30.9% for alcoholic drinks (from 550 EUR per hectoliter pure alcohol to 720 euros);
- 31.1% for Intermediate products (from 45 EUR per hectoliter to 59 euros).

However, this proposal was not accepted by the Council and the amount of excise in the EU for alcoholic beverages remained at the level prescribed in 1992, which did not completely corresponded to the reality. In the past five years, the rates of the alcoholic drinks in the EU-27 has been continuously increasing, and the average excise tax of 6.1 EUR (1L, 40% alc. vol.) which was levied in 2008, was increased by 13.3% and in 2013 it was 7 EUR (per liter of alcohol 40% alc. vol.). Increases in the excise duties in this period were carried out by 17 member states, while the growth was moving in the range from 2.3% in the Czech Republic up to 124.9% in Greece.

The trend of increase has continued with the intermediate products as well, and in the EU-27 the average excise tax of 1.35 EUR (1L, 20% alc. vol.) which were levied in 2008, increased by 25.6% and in 2013 it was 1.70 euros. The increase of the excise duties in this period was made by the 18 member states and it ranged from 1.6% in Slovakia to 250% in Romania.

Along with this increase, 13 member states have increased the VAT rates (the increase was in the range from 1% in Slovakia to 7% in Hungary). Despite the increase in the excise, 11 states have increased the general VAT rates (the increase was in range from 9.5% in Portugal to 31.6% in Denmark). However, although the taxation trend was not increasing in the member states, the European Commission on 26/5/2014 announced the communication IP/04/669, which marks the beginning of a broad debate on this subject. The report indicates the effects of the current system of excise taxation and its impact on the proper functioning of the internal market, as well as on the competition between different types of alcoholic beverages, especially because of the differences in the

levels of the excise duty, the current real value of the minimum rates that were set in 1992 and the wider objects of the Treaty on European Union⁵.

Considering these facts, the European Commission considers that it is necessary to achieve a higher level of convergence of the excise rates, in order to affect equally on the competitiveness between the member states, as well as to reduce the informal economy caused by the large differences in the taxation excise. Having in mind that the proposal to change the minimum level of taxation in the EU in 2006 have failed, this time the European Commission has opened a wide debate in the Council, in the European Parliament and in the Economic and Social Committee. The further proposal which will be adopted depends on the outcome from this debate. If they accept the proposal which will fully take into consideration the measured inflation in the period from 1992 to 2013, the value of the specific excise duties should increase by 53.57%⁶.

The Commission has concluded that it takes more than convergence of the excise rates in the different member states in order to reduce the distortion of the competition and the fraud. However, because of the widely different views of the member states regarding the appropriate levels of minimum rates and that any change would require unanimous agreement, at this point the Commission is not trying to make a proposal.

The tobacco products - The beginnings of the excise tax for tobacco products are dating from 1972, when the first directive was brought. This directive sets the structure of taxation of these products. Since this decision, a number of directives have been carried out, which tampered the taxation system in terms of the taxation structure i.e. changes of the specific and proportional part of the excise duty. On June 21-st 2011, the European Union Council adopted the Directive 2011/64/EU. With the amendments provided in this Directive, changes in the system for calculating the excise duty on cigarettes as well as the amount of the minimum excise duties are planned. According to the same directive, an increase in excise duty payable on cigarettes and tobacco is planned. The increase of excise tax for cigarettes is intended to apply with the following dynamics:

⁵http://europa.eu/rapid/press-release_IP-04-669_en.htm?locale=en

⁶[http://fxtop.com/en/inflationcalculator.php?A=1.87&C1=EUR&INDICE=EUCPI2005&DD1=19&MM1=10&YYYY1=1992&DD2=01&MM2=08&YYYY2=2013&btnOK=](http://fxtop.com/en/inflationcalculator.php?A=1.87&C1=EUR&INDICE=EUCPI2005&DD1=19&MM1=10&YYYY1=1992&DD2=01&MM2=08&YYYY2=2013&btnOK=Compute+actual+value) Compute+actual+value (accessed 1 November 2014) and personal calculations

- From January 1, 2011: At least 57% of the average weighted retail price of the cigarettes or not less than 64 EUR per 1000 cigarettes; and
- From January 1, 2014: At least 60% of the average weighted retail price of cigarettes, or not less than 90 EUR per 1000 cigarettes.

The exception of this rule is provided for Bulgaria, Estonia, Greece, Latvia, Hungary, Poland and Romania, which have transitional periods expiring on December 31, 2017.

The increase of the excise duty for tobacco smoking, as finely ground tobacco, is intended to apply in the following dynamics:

- From January 1, 2015: At least 46% of the average weighted retail price or not less than 54 EUR per kilogram;
- From January 1, 2018: At least 48% of the average weighted retail price or not less than 60 EUR per kilogram; and
- From January 1, 2020: At least 50% of the average weighted retail price or not less than 60 EUR per kilogram.

Energy products - the basic structure of the excise tax on energy was set in 1992, when the minimum amounts of taxation were established between the member states. Since then, this Directive has undergone more changes, whereby today the Council Directive 2003/96/EC from 27 October 2003 is used. The newest initiative of the Commission (COM (2011) 196) aims to modernize the taxation of energy. In the energy taxation certain changes are necessary in order to remove the current imbalance and take into consideration the CO₂ emissions and their energy content.

Moreover, the European Commission proposed taxation of energy by splitting the excise into two components. This will encourage the energy efficiency and the use of environmentally favorable energy sources, and will avoid the distortion of the competitiveness of the internal market. In that way, the member states can restructure their entire tax structure, in order to move the tax burden from labor force to consumption, which can contribute employment growth. The Directive was scheduled to come into force in 2013, but in order to fully harmonize the taxation of energy by 2023, long transitional periods were predicted in order to adjust the new taxation structure.

Its main objectives are to satisfy the priority objectives:

- The fight against climate changes in the EU;
- Improving energy efficiency;

- Encouraging renewable energy sources; and
- Providing fair competition on the domestic market.

To achieve this, the proposal is based on objective criteria taxation - CO₂ emissions and energy content. Advantages of this tax would be:

- Coherent taxation;
- Users will get a clear price signal to reduce the emissions and to save energy;
- Double taxation of energy, which overlaps with the instrument of exchange emissions in the EU, to be removed;
- The use of biofuels which will be exempt from CO₂ taxation.

The future adoption of this Directive practically brings two components of taxation: the first is the CO₂ tax and the second is related to the energy value of the energy resources, which together give the final excise of the energy products. In order to cushion the price shocks, successive increase of the excises within five years from the date of adoption of these amendments is provided. Also, the European Commission with this Directive insists on introduction of the principle of proportionality, or principle of equal taxation of petrol and diesel. According the Progress Report published by the European Council on June 3-rd 2014, this proposal is still a subject of discussion between the member states, whereby the principle of taxation of two components is accepted by most of the countries, but still, among the member states remains open the questions in terms of: the amount of the minimum rates, the transitional periods etc.

2. National legislation in the field of excise duties

The national legislation which regulates the excise system in the Republic of Macedonia has been harmonized with the European directive on excise duties from 1992 since 2001, as well as with the structural directives and the directive on approximation of excise rates separately for each group of excisable goods. Taxable is the consumption of those excise goods which are mandatory with the European directives. They include mineral oils, tobacco products, alcohol and alcoholic beverages, with the exception of the electrical energy, which in the Republic of Macedonia is not yet subject of taxation. Since April 1, 2003, Macedonia has joined the World Trade Organization whereby it took the obligations

relating to the equalization of the excise on domestic and foreign tobacco products. Therefore, from January 1, 2007, the excise taxes on the tobacco products are in a full compliance with the agreements of the WTO and at the same time they qualify for taxation of foreign and domestic products provided in the Article 110 of the Treaty on the Functioning of the European Union (Lisbon Treaty), according which, an equal treatment in the taxation of domestic and imported products is provided.

In 2009, a Law amending the Law on Excise was adopted (Official Gazette of the Republic of Macedonia No. 105/2009) according which, the responsibility for management of the excise was transferred from the Public Revenue Office to the Custom Administration. This legal decision came into effect on January 1, 2010. Regarding the importance of the excise duties for the financial stability of the state, the collection and control of excise in all EU Member States is performed by the customs services. With the adoption of these amendments, the Republic of Macedonia has made another step toward bringing the standards of work which are applicable in the EU Member States, where the management of the excise is carried out by the customs services. The Law which is currently in force in the Republic of Macedonia, is partially harmonized with New System Directive of the European Union, as well as with its accompanying structural directives, separately for each category of goods, which are subject to excise duties, which are:

- Council Directive 2008/118/EC from 16 December 2008, concerning the general arrangements for excise and repealing the Directive 92/12/EEC;
- Council Directive 2003/96/EC from 27 October 2003, on restructuring the Community framework for the taxation of the energy products and electricity;
- Council Directive 2010/12/EU from 16 February 2010, amending the Directives 92/79/EEC, 92/80/EEC and 95/59/EC on the structure and excise rates applied to the manufactured tobacco and the Directive 2008/118/EC;
- Regulation (EC) no. 684/2009 from 24 July 2009, for the application of the Directive 2008/118/EC on computerized procedures for movement of excise goods under the regime of deferred payment of excise duties.

3. Expected effects of membership in the European Union

The undertaken reforms in the tax policy in the period 2009-2013 in the EU Member States have led to an increase in the consumer taxes, as well as to a slight decline of the labor taxes. In that context, larger number of the Member States have started to increase excise duties in various types of goods. The trend of excise increase remains. Regarding the taxation of the energy, 15 member states made an increase of the excise duties, while only one member state performed reducing of them. The increase of the excises also is noted in the alcoholic beverages, tobacco, sugar and other types of excise goods, in 17 EU member states, while decrease was made only by one member state.

Table 1: Review of the tax changes in 2012 and 2013 in the EU Member States

Type of tax		Tax changes	Statutory rates	Tax base
Excise	Energy and electrical energy	↑ Increase	BG, EE, EL, ES, HR, IT, CY, LT, HU, MT, PL, PT	BG, CZ, ES, LV, AT
		↓ Decrease	/	SE
	Alcohol, Tobacco, Sugar etc.	↑ Increase	EE, IE, EL, ES, HR, CY, LT, LU, HU, MT, NL, AT, PL, PT, RO, SI, UK	
		↓ Decrease	/	DK

Source: DG Taxud

The Law on Excises in the Republic of Macedonia, on a large scale is harmonized with the Systematic Directive of the European Union, as well as with its accompanying structural directives, separately for each category of goods which is subject to excise duties. However, the current rates for more excisable products are still lower than the minimum prescribed with the *acquis communautaire* of the European Union. The current proposals of the European Commission are leading to additional increase of the minimum excise duties amount, so the compliance with the prescribed minimum of the EU will represent

additional challenge for the Republic of Macedonia. With the initiation of the negotiations to join the EU, the Republic of Macedonia will need a transitional period for the application of the minimum rates prescribed by the EU acquis, primarily to mitigate the price impact on the population and the adaptation of the domestic enterprises on the new competitive conditions in the EU common market.

4. Alcohol beverages

The Excise Law, which is currently in force in the Republic of Macedonia, is partially in compliance with the Directive 92/83/EEC, which prescribes the minimum excise duties on alcohol and alcoholic beverages that are applied on the territory of the European Union (EU). Alcohol and alcoholic beverages in the Republic of Macedonia are excisable goods and according the excise law the excise taxes are:

- Beer: 4 MKD⁷/per liter/alcohol level or 1.25 MKD/per liter/degree extract;
- Wine: 0 MKD/liter;
- Sparkling and sparkling drinks: 0 MKD/liter;
- Intermediate: 340 MKD/liter of pure alcohol; and
- Ethyl alcohol; 340 MKD/Liter of pure alcohol, measured at a temperature of 200C.⁸

If these amounts are converted into EUR and are compared with the values of a specific excises, the following values derive:

⁷ Macedonian denar (national currency)

⁸http://www.finance.gov.mk/files/u8/Zakon_za_akcizite_precisten_tekst_82_2013.pdf (accessed 3 November 2014)

Table 2: The excise rates applied to the most common alcoholic beverages with a typical alcoholic strength and volume (in EUR)

	Beer 1 liter with an alcohol content of 5% vol	Wine - 70 cl with an alcohol content of 15% vol	Sparkling wine - 70 cl with an alcohol content of 15% vol	Intermediate products - 70 cl with an alcohol content of 22% vol	Drinks -70 cl measuring 40% vol
Scope in EU	0,10-0,97	0-1,92	0-3,82	0,31-4,94	1,70-10,99
Minimum rates	0.09	0	0	0,31	1,54
Average	0,32	0,39	0,67	1,02	4,54
Republic of Macedonia	0,32	0	0	0,85	1,54

Source: Data calculated by the authors, based on the data from DG Taxud

Expected effects. From table 2 it is evident that Republic of Macedonia has specific excises that are identical to the average of EU-28. With the exception of the beer, all other types of alcoholic beverages (wine, sparkling wine, intermediate products and alcoholic beverages) have lower excises. During the negotiations and their completion, Republic of Macedonia will require harmonization of the excises with the minimum prescribed in the EU. Considering that in the EU the increase of the excise taxes on alcoholic beverages has not lost its importance in the last eight years, it is real to expect that Macedonia will be obliged to comply with the higher values of excise compared to the minimum values that are currently in use. For example, if it is necessary to comply with the current excise average of EU-28 (70 cl measuring 40% vol), which currently amounts to 4.54 euros, the excise duty of this kind of drink in the Republic of Macedonia will have to be tripled. These changes in the excise tax will have repercussions on prices of the alcoholic beverages. If one takes into account the average price for 1 liter yellow grape brandy, which is 550 MKD, then the retail price of this product would increase by 862 MKD or by 56.7%.

According the agricultural census, the number of individual agricultural holdings in the country is 49.308.⁹ In the Republic of Macedonia, in 2013 the total arable agricultural area amounted to

⁹ <http://www.stat.gov.mk/Publikacii/PopisNaZemjodelstvo2007/knigaI.pdf> (accessed 3 November 2014)

508.546 ha, whereas to the cultivation of vineyards to 21.497 ha or 4.2%. The annual wine production in 2013 amounted to 1.251.759 hl of wine (of which the wine from fresh grapes dispensers was 1.072.025 hl and the wine from fresh grapes in bottles 179.734 hl). The production of natural alcoholic beverages from wine grapes and wine (whiskey, brandy, grape brandy etc.) amounts to 10.529 hl.¹⁰ Considering that with the increase of the excise, the biggest “losers” will be the domestic companies whose sales assortment includes cheaper domestic drinks, while the biggest “winners” will be the foreign companies that have comparative advantages in their production and can provide cheaper drinks. Beside these effects, the increase of the price will be certainly reflected on the rise of the households cost, which in the total consumption in 2013 amounted to an average of 3.088 MKD or 1.0% of the total cost structure. Therefore, the over-rising prices may lead to increase in the gray and black economy, as well as to increase in the legal and illegal cross-border transaction(s).

5. Excise duties on the tobacco products

Cigarettes. According to the research done by Eurobarometer, in all member states and candidate countries for EU membership in 2010, the Republic of Macedonia was in the group of countries that have extremely high prevalence of smoking, which is at the same level as the one of Republic of Turkey and it is 37%, which is much higher than the EU average of 29%.¹¹

In the Republic of Macedonia, the excise on the 1000 cigarettes amounts to 24.3 euros, whereas it is lower by 62.6% compared with the minimum excise duty in the EU (65 euros). Also, the excise duty on cigarettes was lower in comparison with the other countries in the region: Albania 25 euros, Kosovo 27 euros, Serbia 27 euros, Bulgaria 76 EUR and Greece 102 euros.

From July 15, 2013, a new system of calculating of the combined excise on cigarettes began to be applied. It means that a uniting of the values of the previous combined excise (Ad valorem excise + 35% specific excise by 0.1 MKD per piece + fees) in one single combined excise (Ad valorem excise 9% + 1.3 MKD specific excise, excise

¹⁰ <http://www.stat.gov.mk/Publikacii/6.4.14.01.pdf> (accessed 3 November 2014)

¹¹ http://ec.europa.eu/health/tobacco/docs/ebs332_en.pdf (accessed 5 November 2014)

minimum 1.5 MKD) was made. Also, with the Law Amendments on the Law on Excise Duties ("Official Gazette" no. 82/2013) a linear increase was envisaged, which will be made in the transitional periods between July 15, 2013 and July 1, 2023. After completion of the gradual increase from 24 EUR in 2013 to 59.8 EUR in 2023, the Republic of Macedonia will have lower excise than the European average of 33%, which in 2023 will be 90 EUR per 1,000 cigarettes.

Tobacco. Beside the increase of the excise duties on cigarettes, with the Law Amendments on the Law on Excise Duties ("Official Gazette" no. 82/2013) was also provided an increase of the excise duties on tobacco for smoking as finely ground tobacco. After completion of the gradual increase from 24.4 EUR in 2013 to 32.5 EUR in 2023, the Republic of Macedonia will have lower value than the European average of 24.9%, which in 2023 will be 60 EUR per kilogram.

Expected effects. Analogous to previously stated, it can be concluded that after the transitional periods in which the specific excise duty on cigarettes and tobacco will be successively increased, the Republic of Macedonia will still remain with lower excise minimum than the projected one of the EU. Although this increase is scheduled to be implemented in a long time frame, the risk of developing distortions on the cigarettes market are not excluded. The increase of the cigarette prices will inevitably lead to a reduction of the demand for these products, which of course will be reflected on the sale of the tobacco manufacturers in the country. These changes will mostly lead to a fall of the cheapest cigarettes demand, which includes the best-selling pack of cigarettes. If the pricing policies of the companies which sell cigarettes do not get major changes, the price of the best-selling pack of cigarettes would increase by more than double.

6. Excise duties on energy resources

The excise duties on energy that are applied in the Republic of Macedonia significantly deviate from the EU-28, i.e. part of the energy resources are not subject to excise duties: coal, coke coal, electricity and natural gas. The future introduction of excise on these energy resources will certainly cause an increase of the energy retail price, inflation, increase of the credit indebtedness of the citizens and thus decline in the standard of living.

Table 3: Review of the specific excise of the energy resources in EU-28 (as of July 1, 2014)

	Motor fuels			Objectives set out in Article 8 (2)			Heating fuels and electricity		
	Excise range (lowest value-highest value)	Simple arithmetic middle	Republic of Macedonia	Excise range (lowest value-highest value)	Simple arithmetic middle	Republic of Macedonia	Excise range (lowest value-highest value)	Simple arithmetic middle	Republic of Macedonia
Gasoline (1000 liters)	359 – 802	557.12	349			349			349
Gas oil (1000 liters)	330– 674	422.46	195	0 - 477.76	219.31	145	195	188.99	195
Kerosene (1000 liters)	329.79 - 731	434.04	145	21 - 731	308.33		0 - 731	267.6	
Heating oil (1000 kg)	/	/	1,6	/	/	1,6	13.5 - 462.8	70.96	1,6
LPG (1000 kg)	0 - 502.8	190.97	79	0 - 332.12	117.08		0 - 67.57	67.57	
Natural gas*	0 - 10.13	1,89	0	0 - 3.86	1.44	0	0 - 10.92	1.31	0
Coal and coke*	/	/	/	/	/	/	0 - 11.76	1.32	/
Electricity**	/	/	/	/	/	/	0 - 43.4	5.42	/
Mineral oils	0.006 - 24.85	7.27		/	/		/	/	

Source: Calculations by the authors based on a data from DG Taxud

*) 1 Gigajoule energy value

**) 1 MWh energy value

In order to eliminate the differences in the taxation between Member States (e.g. Some member states such as Denmark, Sweden, Germany, UK and Slovenia apply special duty called "CO₂ tax"), the new proposal of the European Commission contains a combined duty which is composed of two components. The first component is the planned taxation of the energy resources and consists of fixed amount charged per unit of CO₂ emission factor, while the second component relates to the energy content of the energy resource. The total excise duty which will have to be paid is calculated as a sum of the first and the second component, i.e. 52.1 EUR + 337.9 EUR = 390 EUR. The detailed calculations for the new excise taxes are shown in the following table.

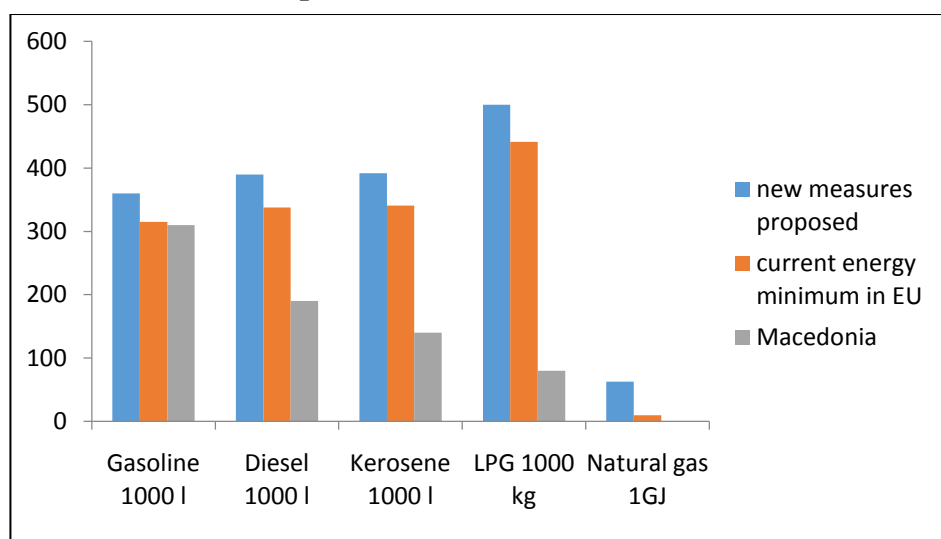
Table 4: Proposal for revision of the excise rates on motor fuels and heating fuels

	NCV GJ/t	Density kg/m ³	Emission factor tCO ₂ /TJ	NCV per unit GJ	Emissions per unit of tCO ₂	CO ₂ minimum in EUR	Energy minimum in EUR per GJ	CO ₂ minimum in EUR	Energy minimum in EUR	Total excise in EUR
Motor fuels – new minimum										
Gasoline 1000 l	44	745	69,2	32,8	2,3	20	9,6	45,4	314,7	360
Diesel 1000 l	42,3	832	74	35,2	2,6	20	9,6	52,1	337,9	390
Kerosene 1000 l	43,8	810	71,8	35,5	2,5	20	9,6	50,9	340,6	392
LPG 1000 kg	46	n/a	63	46	2,9	20	9,6	58,0	441,6	500
Natural gas 1GJ	47,2	n/a	56,1	47,2	2,6	20	9,6	53,0	9,6	62,6
Heating fuels – new minimum										
Gas oils 1000 l	42,3	832	74	35,19	2,6	20	0,15	52,1	5,3	57,4
Kerosene 1000 l	43,8	810	71,8	35,47	2,5	20	0,15	50,9	5,3	56,3
LPG 1000 kg	46	n/a	63	n/a	2,9	20	0,15	58,0	6,9	64,9
Fuel Oil 1000kg	40	n/a	77,3	n/a	3,1	20	0,15	61,8	6,0	67,8
Coal GJ	25,8	n/a	94,5	n/a	0,1	20	0,15	1,9	0,2	2,04
Natural gas 1GJ	47,2	n/a	56,1	n/a	0,1	20	0,15	1,1	0,2	1,27

Source: Calculations by the authors based on a data from DG Taxud (Energy Tax Directive COM(2011) 169
NCV - net calorific value

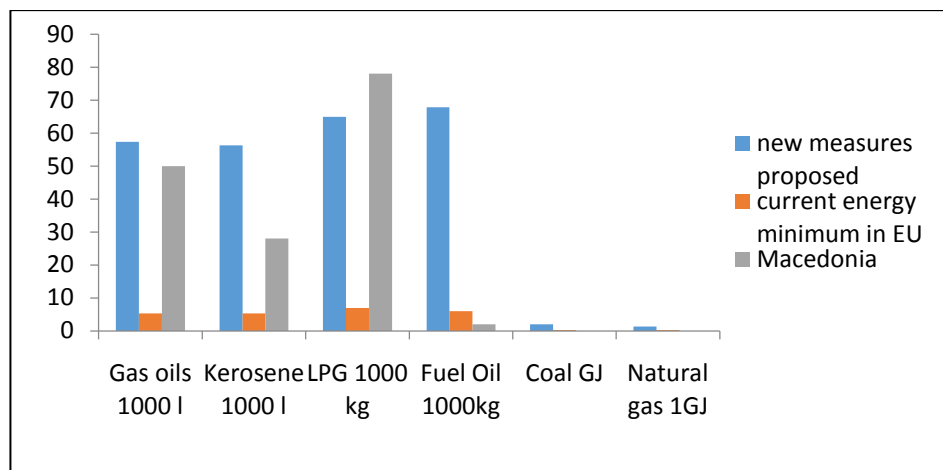
As evident from the following chart 1, the smallest differences in the amounts of the new proposed excise values of the motor fuels, compared to the minimum excises currently used in the EU-28, occur in petrol, while the largest are at the liquefied petroleum gas (LPG) and natural gas.

Chart 1. Comparison of the new and existing rates of excise duties in the EU-28 and the Republic of Macedonia for motor oils (in EUR)



With the heating fuels, the smallest differences between the new proposed excise values and the minimum excises currently used in the EU-28, occur in the coal and natural gas, while the largest in liquefied petroleum gas and heating oil (Chart 2).

Chart 2. Comparison of the new and existing rates of excise duties in EU-28 and the Republic of Macedonia for heating fuels (in EUR)



Expected effects. Considering that the Republic of Macedonia is no longer a producer of oil derivatives, the increase of the excise duties cannot affect the production of these energy resources. However, regarding the fact that oil derivatives represent a major input in the key sectors such as transportation and electricity production, as well as in all other production processes, there is a possibility of major distortions in the process of their alignment.

According to the above mentioned facts and arguments, in the forecoming years the country will have to drastically increase the excise duties on several products (tobacco, cigarettes, electricity, gasoline, oil, gas, etc.) and to take into consideration the strategic importance which these products are going to have. In order to reduce the negative effects of the imminent increase in excise duties, to allow appropriate adjustment of the economy, to minimize or avoid the distortions that may arise from the drastic increasing of the excise taxes which will lead to increase of the energy retail price, to undercut the competitiveness, to make inflationary pressures, to increase credit indebtedness of citizens and decline in living standards, the Republic of Macedonia will need to convey efficient Excise strategy.

Conclusion

The analysis of the economic impacts of the excise legislation alignment between the Republic of Macedonia and EU directives, results with more relevant findings and conclusions:

- In order to create a Common market of the European Economic Community, it was of great importance to establish the Customs Union between the member states. The establishment of the customs union was implemented through two parallel processes. The first one included the abolition of the customs duties between member states, and the second one, the establishment of the Common Customs Tariff.

- Regarding the harmonization of the excise duties within the EU, it is important to emphasize that only minimal agreements relating to the minimum tax burden are achieved. Due to the systemic directives governing this area, only the minimum amount of tax are provided. Although the process of harmonization of the excise duties have started since the early 70's, until today, no common solution is found that will enable the same level of taxation for all member states. Each member state determines the amount of excise above the minimum by its own, which is regulated with the system directives.

- The process of negotiations for accession to the EU is conducted between the candidate country and the other member states, while the European Commission has the function of a mediator.

- The negotiations for some chapters are ending through making the final general position of the Member States. However, certain chapters may not be considered finally closed for reasons that during the negotiations with the European Commission the rule "Nothing is agreed until everything is agreed" is applied, so even if the negotiations are finished and are temporarily closed, the chapters can still be re-negotiated.

- The undertaken reforms in the tax policy in the period 2009-2013 within the member states of the EU have led to an increase in the consumer taxes, as well as with a slight decline of the labor taxes. In this context, much of the member states have started to increase the excise duties in various types of products. The trend of excise increase remains to grow, while fifteen member states have increased the excise duty of energy or of the special regimes, while reduction is made only by one member state.

- One of the main conditions for entering into the European Union is the harmonization of the national legislation with the *acquis communautaire* of the European Union, which includes excise legislation, as well as achieving development and implementation of the new computerized customs systems, as well as gaining interoperability and interconnection with the information system of the European Union.

- The Excise Law on a large scale is aligned with the Systematic Directive of the European Union, as well as with its accompanying structural directives, separately for each category of goods which is subject to excise duties.

- In the Republic of Macedonia there are currently exceptions in terms of the scope of the goods that are subject of taxation, because there are products which are not subject of taxation in the country, but are under taxation in EU, such as: coal, coke coal, electricity and natural gas.

- The exceptions from the European minimum, in the Republic of Macedonia are marked with the excises of the cigarettes, tobacco and alcoholic beverages.

- With the start of the negotiations for accession to the EU, the Republic of Macedonia will need a transitional period for application of the minimum rates prescribed by the EU *acquis*.

- In order to reduce the negative effects arising due to the drastic increase of the excise taxes (tobacco, cigarettes, electricity, gasoline, oil, gas, etc.), and in order to reduce the negative effects of the imminent increase of the excise duties, there is a need for adopting long-term Excise strategy. Its basic goal will be adjusting the economy, buffering the negative effects and the reduction of the distortions, which will lead to enormous increase of the retail price of the energy, inflationary pressures, increase the credit indebtedness of the citizens, as well as decline in the standard of living.

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Original scientific paper

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THE NECESSITY OF APPLYING MARKETING STRATEGIES IN TOURISM – THE CASE OF SLOVENIA AND TUNISIA

Abstract

It is known that tourism represents an interaction between tourist offer on one side, and tourist demand on the other side. The results of this interaction contribute towards the increase of the national gross domestic product and an increase of the rate of employment. It can be stated that significant attention needs to be allocated to tourism and its development and distinction of the destination has to be made in order for it (the destination) to be attractive for tourists (domestic and foreign as well). This can be done if and only if the policymakers in tourism create a marketing strategy for development of different types of tourist products and promotion of those products on the targeted markets. Therefore, based on a comparative analysis of the tourism strategies of Slovenia and Tunisia, this paper presents prospective guidelines for creating and implementing these strategies in the Republic of Macedonia. The experiences of these countries can serve as a solid basis for developing strategies in tourism at different levels, which will contribute to its successful development in the Republic of Macedonia.

Key words: marketing, tourism, marketing strategies.

JEL classification: M31, M39

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Introduction

Tourism as an industry, is an interaction of supply and demand that is formed as a result of people's need to find themselves as tourists on one hand, and on the other hand, they also can be actors who organize the supply of the tourism product for satisfying the needs of tourists. The results of an interaction like this contribute for up-surfing of the meaning of the tourism as an industry and incorporate it as significant element in creation of the GDP, national income and employment.

Besides the meaning and the role of the tourism as an industry, in some way it also mediates the development of other non-industrial branches such as: trade, business, banking industry, public health, education, utilities and crafts as well.

With the emerging of the marketing concept in the mid-20th century, the preferences and consumer behavior are of great importance for the marketers. The application of the marketing in services requires acceptance of the basic principles of marketing in general, rather than a differentiated approach because of the individual characteristics of the tertiary industry. Therefore, the concept of the tourist market means using the general principles of marketing, but with respect to any specifics that are presented with the interaction of the components of the tourist market. With the appearance of the Internet and the social media, the consumers are becoming more aware of the products and services they are using and by utilization of the above mentioned channels they gather information about what they need.

1. Theoretical frame regarding the marketing strategy in tourism

Marketing strategies and strategic planning, at its base, represent a process that involves taking steps which are organized in order to form and lead the organization and what it stands for (Porter, 1995: 63-69). There are so many theories dealing with the matter of marketing strategies. Some authors (Pike, 2004: 127-131) suggest that the best and the most efficient way to create a strategy and a strategic plan is to firstly identify the problem, i.e. the approach has to be based on the problem and finding a way to resolve it. However, other authors (Poon, 1993: 443-449) in the focus of creating the strategies and plans, put the

intention and purpose of the business factor in tourism, as a basis for the formulation of the strategy. But there are also authors (Roehrich, 2004: 38-45) who believe that the theory of the matrix is the most appropriate in the creation of strategies and strategic plans. From all this elaborated above, it can be considered that the most appropriate model when developing marketing strategy is the one that includes the aims and intentions of the business included in tourism. Still, taking into account that the development of marketing strategy in tourism is an extensive process, the internal and external factors of business environment, resources, trained personnel, competition and etc. have to be taken in consideration (Roehrich, 2004: 38-45).

In their base form, the strategies include creation of a strategic plan that is an essential tool for implementation of the plan of companies including the one in tourism. Thus, strategic plans can be used as mechanisms by which companies will answer on the more and more challenging working conditions on the market. Therefore, it can be stated that the strategic plan is closely related to the direction in which the company should go in the future, in line with its ambitions, resources and how it interacts with the world in which it operates (Pike, 2004: 217-222). The role of the strategic plan of the companies in tourism varies depending on how the market works, but for most of them, it can be said that they have a single purpose and that is to help the company for better utilizing the given resources in order to improve its market position. Even though it is like that, still, there are few steps that are common to all companies in the creation of marketing strategies. These steps include corporate, operational and business aspects while formulating the strategies (Poon, 1993: 88). These considerations, in some point of time help the business in tourism to gain competitive advantage over the competition.

The process of strategic planning contains a need to create strategic alternatives. But the growing demand for services in tourism in contemporary working conditions can be satisfied only by creating modern marketing strategies. Strategy is a tool that allows companies to implement all the plans and to make effective decisions that will help in achieving their organizational goals.

In order for this theoretical framework to be successful in practice, there must be an evaluation and control of the process of creating marketing strategies in tourism. Some authors (Porter, 1995: 57-

61) go even a step further and propose concrete steps for evaluation and control of the strategy:

- Defining parameters that can be measured
- Defining values of those parameters
- Process of measuring
- Comparison between the procured results with previously set standards
- Implementation of strict steps for application

Taking this into consideration, for creating a prosperous strategy, the process has to be permanent i.e. it must gain constant feedbacks about the strategy's efficiency as well as every segment that must be improved in future and all that with one goal: satisfying the more demanding need of the consumers.

The absence of a comprehensive marketing strategy in tourism is, actually, the basis of the negative trends in tourism development. There is a need to create a generic framework that will enclose all the parameters that are essential for creating a complete marketing strategy in tourism. Although in the past it was believed that as the world becomes increasingly globalized, so the products and services would become more prevalent (Pike, 2004: 311-315).

The market research in a way represents a collection of data with a unique task to be used in order to achieve the marketing plan so that they become more and more efficient.

The tourist industry has a constant need for these types of research and data because of various reasons (Goodall & Ashworth, 1997: 187-201):

- Identifying of the possibilities to develop tourist products;
- Setting up prices which correlate to the ones of the competition;
- Ensuring that the distribution channels work effectively;
- Selecting the best possible combination of promotional techniques and tools;
- Making decisions to invest;
- Choosing location to open new hotels and restaurants

When a research is done in an area which has essential significance to the economic development of a country, it is of great importance to be able to compare the experiences from other similar countries and to see how they have dealt with the growth and

development of tourism. In this paper, the experience from the Slovenian and Tunisian example is taken into consideration.

2. Experience from creation of marketing strategy in tourism – Slovenia

According to the assumptions from the WTO (World Tourism Organization, 2000: 87), the tourism industry in Slovenia participates with around 12.1% of the GDP of the country. And, at the same time, the tourism is also an important export activity, contributing with around 8% from the total export and around 40% of the total export of services and payments. In the past decade, tourism in Slovenia shows progressive rate of growth, both when it comes to increase of the total number of tourists and overnights, as well as when it comes to the spending in tourism (source: Bank of Slovenia in Slovenian tourist board, 2007: 11).

Based on previous research, the people responsible for the tourism in Slovenia have identified several obstacles in the development of the competitiveness of the Slovenian tourism (Slovenian tourist board, 2007: 11):

1. Financial assets to market and develop tourism – limited financial assets decrease the possibility to develop tourism, as well as the possibility to develop strategies for the tourism in general;
2. Availability of the destination – few direct flights from the main countries which generate tourists, but also the outdated road and railroad infrastructure and so on;
3. Promotion – the inconsistent use of the national brand “I FEEL SLOVENIA” in terms of promotional activities on the foreign markets and the low level of recognition as a tourist country;
4. Tourist offer – lack of competitiveness of the tourist products, added value to the price of the tourist product as well the lack of integration of the tourist offer;
5. Human resources in tourism – the lack of qualified and quality workforce;
6. Legislation – the existing legislation is inconsistent and not in correlation with the needs of the tourist sector

Source: Slovenian tourist board. Marketing plan for Slovenian tourism 2007/2011. 2007 (Slovenian tourist board, 2007: 11).

These obstacles can be overcome if the officials follow the policies for tourism development. They include cooperation in planning, shaping and marketing of the tourism in Slovenia on all levels, starting with the local and all the way to the national level. It is also important to manage to promote Slovenia as a tourist destination in general.

The tourism marketing plan for Slovenia from 2007 includes the tourist offer which has been previously researched, valorized and consists of natural and unique specifics, but in accordance with the trends of the world's tourism (Slovenian tourist board, 2007: 13).

The aim of this strategy is to focus on a tourist offer on smaller segments of the market. That means developing a detailed plan for successful segmentation of the market, research of what that market needs and wants as well as to create a tourist offer which will satisfy the needs of those markets.

It can be stated that the strategic marketing concept is consisted of diversification strategy, which in phase one includes development of new products and promotion of those products on new tourist markets. The diversification of these products will be done through expansion and improvement of the existing ones, and offered on the tourist markets. This concept also includes a strategy for differentiation, meaning differentiating the tourist offer with distinctive and familiar attributes which are unique for Slovenia. The main goal of this strategy is to create a powerful brand association with the help of these unique specifics for the Slovenian tourism.

When it comes to the present system of the tourism in Slovenia, it can be stated that there are seven different tourist products which are complete, and two other which are in the development process. The completed tourist products include (Slovenian tourist board, 2007: 21):

1. Active holiday;
2. Cities and culture;
3. Nature, eco-tourism and rural tourism;
4. Gastronomy tourism;
5. Health tourism;
6. Business tourism and
7. Entertainment and gambling.

Additionally, the products in the development phase are (Slovenian tourist board, 2007: 19):

1. Offers for more demanding tourists;
2. Offers for young people.

Apart from these basic products which are offered to individuals, combined tourist products can be created in tourism. This means that they represent a combination of two or more individual products. The following can be mentioned as such (Slovenian tourist board, 2007: 24):

- Regional tourist product;
- Combined tourist product;
- Partial tourist product.

In general, it is about three different development zones, for which the strategy has the aim to incorporate and to create synergy in between (Slovenian tourist board, 2007: 12):

- Increase of the competitiveness;
- Creation of positive business environment;
- Efficient and innovative marketing.

These development zones are crucial part of the investments in quality and innovation, the development of strategic partnerships with outer parties in order to eliminate the obstacles for effective tourism development. It can be said that the aims of the strategy are (Slovenian tourist board, 2007: 28):

- Creation of competitive advantage through innovation, added value, safety, security and so on;
- Increase of the quality of life of the local population;
- Tourism development via partnerships for development, public-private partnerships, improvement of the image of tourism and so on.

In the years to come, the tourism in Slovenia will be in the focus of the economic development of the country in general. This will contribute towards creation of significant contribution towards the increase of the GDP, increase of the employment, regional development and so on.

3. Experience in the creation of marketing strategies – Tunisia

Tunisia is a small country located in North Africa. According to some, Tunisia is a strategically irrelevant state that has no natural or oil resources (Mihailovich, D., & Sommer, N., 2011:46-48). Nevertheless, Tunisia runs on tourism, which is crucial for the economy (Travel and tourism in Tunisia, 2009: 157). Thus, in order to approach the

development of the economy, it is first necessary to start developing a new marketing strategy that will contribute to the development of tourism in the post-revolutionary period. Tourism in Tunisia has several advantages in terms of attracting tourists: beautiful beaches, a variety of archaeological sites, excellent climate throughout the entire year and the most important fact, it is close to Europe.

Tourism is a sector of strategic importance for Tunisia, as it participates with about seven percent in the gross domestic product of Tunisia and generates about 400,000 jobs (Mihailovich, D., & Sommer, N, 2009: 46-48). Therefore, having into consideration the close link between tourism and the other sectors of economy (such as trade, crafts and transport), the reduction in the number of tourists will negatively affect revenues from these and other sectors of the economy, which represents an indirect threat to those people who depend on tourism.

The number of tourists who visited Tunisia in 2011 was not over three million. This compared with over seven million tourists in the pre-revolutionary period is a very small number. But it is important to point out that tourism in Tunisia in 2012 showed high rates of growth, despite all that had happened in this country. Nevertheless, regardless of this fact, the tourism industry, from a business perspective, is still in the stage of recovery and in any case is not in favor of tourism stakeholders (Travel and tourism in Tunisia, 2009:157). Even though, it was expected for this trend of progressive growth to continue, nevertheless, the situation is different, as in the beginning of 2013 violence once again broke out, contributing greatly to a reduced number of tourists visiting Tunisia.

Perhaps, it is too early to assess how these developments will affect tourism in Tunisia. However, it is clear that indicators point to an increased caution among potential tourists, travel agencies and tour operators that offer arrangements for Tunisia. There are even cancellations of already booked travel arrangements. This greatly affects the overall situation of the tourism industry in Tunisia.

The tourism sector in Tunisia is experiencing a decline, also as a result of its excessive dependence on resorts that provide services with a medium level of quality. This business model brings low profits, and carries a high risk of volatile economic conditions (Mihailovich, D., & Sommer, 2011:157). Data from the World Tourism Organization show that in average tourists spend \$385 per capita, which is the smallest amount from among the other countries along the Mediterranean. In

comparison, the average per capita consumption of tourists who visit Morocco is \$725, while in Turkey they spend \$770, in Egypt \$890 and \$1,000 in Greece (World Tourism Organisation, 2000: 76).

The recovery of tourism in Tunisia mostly depends on the increase of the stability and security of the country. But, in order for the tourism sector to develop and ensure economic growth and development that will contribute to the creation of new jobs (especially among the young population), considerable changes must be made in the overall strategy of the country, especially in two directions (Travel and tourism in Tunisia, 2009: 67).

1. First, Tunisia must take into account the demographic changes that are taking place in Europe and the changes in the needs and demands of tourists for new forms of tourism (especially cultural, environmental, adventure and research tourism). Estimates of the World Tourism Organization WTO are that about 40% of world tourism is in fact, a tourism associated with cultural activities. These types of activities are more profitable and less susceptible to seasonal changes.
2. Second, Tunisia must create a new market in order to diversify its revenues from tourism. This will contribute towards reducing or perhaps eliminating the excessive dependence it has on tourists from Europe, which currently represent 80% of the total number of tourists in Tunisia. Markets in Asia and South America are on the rise and are becoming ever more important sources as the standard of living is constantly improving and air traffic is in constant development.

Experts argue that authorities have failed to create a marketing strategy that will reflect the actual situation in the tourism sector. Existing plans do reflect the needs and the demand of foreign tourists, but are not in line with the post-revolutionary period. They have created a strategy that has failed to take advantage and exploit these events, but has rather concentrated on mass tourism with a focus on making use of the potentials of the seashore. It is important to note that this strategy does not correspond to the needs of the tourists, especially the tourists from Europe (Travel and tourism in Tunisia, 2009: 67).

Tunisia has all the fundamental and basic features for development of diversified tourism and tourism with a high level of quality. Also, the use of these advantages is in the hands of the state and the institutions, which must develop a strategy that will contain the most

important values that can be offered to the market and which will be oriented towards satisfying the needs of “new” tourists from emerging markets. Nonetheless, the political instability has led to a distortion of the image (which is an important component in the process of making a decision to travel) for Tunisia as a tourist destination. (Kalboussi, 2011: 17).

Those competent must promote this destination by creating an aggressive marketing campaign that will contribute towards restoring confidence among potential tourists and will help restore a positive image. Also, they will have a difficult task in finding new markets where to sell the tourism product, and in doing this they will contribute to the development of the tourism industry and the economy as a whole.

Conclusion

The comparative analysis in this paper could be used for future planning of the activities in the tourism industry in Macedonia, as well as to help in the direction in which activities and measures should be taken and how those activities should be implemented. When it comes to planning the strategy in tourism, a lot of factors have to be taken into consideration. Amongst those factors are the economic, political, social, technological factors as well as the influence of the media and so on. The influence of these factors can lead towards (You, O’Leary & Fesenmaier, 2000: 181-197):

- Growth of tourism in the countries which previously weren’t generating international tourist travels
- Growth of tourism for specific groups of the society
- Development of new tourist products
- New and innovative ways of buying the tourist product.

The research contributes towards better understanding of the tourist products and that the development of new product will lead primarily to:

- Change the consumer behavior
- Improved availability of the tourist products and
- Eminent technological innovations.

It can be said that the continual growth of pressure in the modern way of living will lead to people seeking holidays to relieve from the

stress. Thus, it seems that tourists will prefer to travel more to destinations which are different and unique, opposed to what they are used to. On the other hand, because of the constant development of technology, the promotion of destinations has changed as well as the distribution of the tourist products. Because of that, it is recommended that the future development of tourism should be based on these fundamentals.

When it comes to framing the strategy for tourism, it can be concluded that there is a need to get the national tourist organization involved in the development of the tourism in general. The organization will be in charge of implementation of the strategy, as well as for the promotion and support of tourism on a national basis. This can and should be done via promotion and improvement of the processes in tourism, preparation and implementation of a program to promote and support tourism as well as to prepare promotional material and promote the tourist values of the destination. Also, it is of crucial significance to prepare and conduct research and analyze the needs and wants of the modern tourist. In this way, the marketing activities can be focused towards the markets which have the highest potential of growth.

In order to improve the image of tourism in Macedonia, there is a need to first make attempts to analyze the similar tourist products and tourist offers of countries which have more or less the similar geography and potential for development. It is of great importance to follow their development throughout the different phases of the process of development. That is because, when these products are properly introduced, the possibility for synchronization of the tourist offer is much higher and the development of different tourist products is much higher as well.

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Original scientific paper

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**THE CRUCIAL FACTORS OF THE KNOWLEDGE
MANAGEMENT IMPLEMENTATION AND EFFECTIVENESS
ON THE TELECOMMUNICATION MARKET IN THE
REPUBLIC OF MACEDONIA**

Abstract

The globalization process emphasizes the need of a new management paradigm that will correspond to the current conditions. Having in mind that the knowledge management is recognized as a strategy that comprehends the most important and relevant issues related to the adaptation of the organization, its survival and its competencies are in conflict with the rapidly changing environment on the open market. The knowledge management implementation and effectiveness in the organization depend on several factors, such as organizational culture, human resource management and information technology.

Therefore, the objective of the paper is to research the influence of the crucial factors of the knowledge management implementation and effectiveness on the telecommunication market in Republic of Macedonia, which is characterized as an open and dynamic market. The research was conducted in 10 companies, on a sample of 100 respondents – employees in these companies. The influence of the organizational culture, human resource management and information technology on the knowledge management implementation and effectiveness was examined.

The results show the importance of the crucial factors in knowledge management implementation and effectiveness and the

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awareness of the managers and employees for the need of constant improvement of knowledge and skills.

Key words: open market, knowledge management, crucial factors, implementation and effectiveness, telecommunication market

JEL Classification: L96; O15; O34

The need of knowledge management as a response at the current conditions on the open market

The process of globalization is characterized through creating and conquering new markets, finding new and cheaper raw materials, decreasing the risk during work, and dominance of the international markets by the multinational companies.

Knowledge management is an interdisciplinary business model which has the knowledge of the organization in its focus. This concept is the embodiment of the processes within the organization that strives towards combining and interaction of data and information, which increases the capacities of the information technologies and human capital.

Knowledge management is a process that should continuously take place within an organization. The objective of this process is not only to manage the knowledge in the organization, but also to create conditions for its creation, distribution and use. Special attention should be given to the creation of the knowledge in the organization, which requires the provision of adequate conditions and ambience.

The process of knowledge management itself can be introduced through six stages:³

- creation of knowledge;
- learning;
- distribution of knowledge;
- transfer of knowledge;
- use of knowledge;
- storage of knowledge.

³ Malhotra Y. (1997) "Knowledge Management in Inquiring Organizations", Proceeding of 2RD Americas Conference of Information System (Philosophy or Information Systems – in Track), Indianapolis, p.56.

When the organization creates a specific knowledge, the next thing that should be done is to share it with the rest of the employees. Sharing or multiplication of the knowledge delivers greater benefit to the organization. More individuals will acquire new knowledge, apply it in the work of the organization, but also, the chances for improving or upgrading knowledge will increase.

The crucial factors of the knowledge management implementation and effectiveness

In order to implement the knowledge management in the organization, it is necessary to create certain conditions. Various authors have studied the relevant factors that influence the development and implementation of the knowledge management in the organization.

According to Davenport and Prusak, crucial factors of the knowledge management implementation are:⁴ knowledge oriented organizational culture, technological and organizational infrastructure, support from top management, relationship with economic values, necessary process orientation, a clear vision and understanding of the language, the meaning of innovation, the required level of knowledge and channels for knowledge transfer.

According to Skyrme, crucial factors that influence the success and the effectiveness of the knowledge management are:⁵ a clear connection between the concept and the business strategy of the organization, knowledge of knowledge (true understanding of the advantages that knowledge brings to the organization), leadership, developed infrastructure of knowledge and an appropriate level of knowledge measurement (measuring the contribution of the knowledge management concept).

The paper will examine the organizational culture, human resource management and information technology as crucial factors of knowledge management implementation and effectiveness.

⁴ Davenport T.H., Prusak L. (2000) "Working Knowledge: How Organizations Manage What They Know", Harvard Business School Press, p.153.

⁵ Skyrme D. (2000) "Developing A Knowledge Strategy",
[www.skyrme.com/pubs/knwstrat.htm] (03.01.2013)

A) The organizational culture as a factor of knowledge management implementation and effectiveness

If the organization tends to be able to meet the challenges of the changing environment, it has to be subject of change itself. Implementation of the knowledge management concept in the organization initiates continuous changes in the organization, which can be made only if the organizational culture is changed.⁶

The organizational culture is the basic precondition for successful implementation of the knowledge management. Such organizational culture will take care of its employees or organizational knowledge that they possess.⁷

Characteristics of the knowledge orientated organizational culture are:⁸

- creating conditions for free expression and creativity of the employees;
- evaluating intangible values in the organization;
- teamwork oriented;
- encouraging innovations;
- motivating transfer (sharing) of the knowledge;
- creating a sense of belonging to the organization;
- permanent learning and improvement;
- encouraging personal development;
- creating an appropriate work environment;
- developing knowledge in the organization;
- creation and transfer of knowledge in everyday activity;
- creating conditions for cooperation;
- access of the knowledge to all;
- strong communication channels;
- developing technological structure.

The organizational culture should be aimed at promoting the knowledge, transfer of the knowledge between the experts and other employees, or between employees themselves in the organization.

⁶ Drucker P. (2002) "Upravljanje u novom društvu", Novi Sad, p.213.

⁷ Đorđević – Boljanović J. (2009) „Menadžment znanja“, Data Status, Beograd, p.103.

⁸ Wheatley M.J. (2004) "The Real Work of Knowledge Management, Leading Organizational Learning", Lossey – Bass, A Wiley Imprint, Leader to Leader Institute, San Francisco, p.55–62.

Transfer of the knowledge can be done in the organizational culture with good communication between employees, cooperation and trust.

B) The human resource management as a factor of knowledge management implementation and effectiveness

The human resources management is directly connected to the use of the human capital in the organization. In fact, the purpose of having this kind of managers in the organization is managing with human resources. Peter Drucker said that contemporary employees have to be seen as a capital, not as a labor.⁹ The organization is successful as well as their employees are. The employees are the most creative and innovative part of the organization and they are the main reason for success or failure of the organization. Only highly educated employees, appropriately motivated, with continuous enhancing of new skills and knowledge can respond to the challenges of the new dynamic environment within the open market.

The human resource management and knowledge management are related, and their common feature is the social interaction.

The objective of the human resource management is to answer the current requirements of the open market by appropriate managing the organizational knowledge which could be performed in several ways:¹⁰

- managing the human capital - recognizes the values of the intellectual capital, allows availability and efficiency of human capital;
- facilitating the transfer (movement) of the knowledge - the main focus is learning and developing effective knowledge management strategies and creating an environment that supports creation, transfer and sharing the knowledge;
- building relationships;
- effective displacement of specialists and experts – monitoring changeable environment that requires a combination of different information, processes and organizational design in order to respond to the current situation.

The pressure of the open market and the competition require special knowledge and skills of the employees. If the management desires to have competitive employees in their organization, they have to

⁹ Drucker P. (2005) „Upravljanje u novom društvu“, Novi sad, p.95.

¹⁰ Đorđević – Boljanović J. (2009) „Menadžment znanja“, Data Status, Beograd, p.115.

work to enhance and develop the knowledge and skills of the employees. Professional training is a process of gaining the appropriate qualification needed for executing the particular tasks. It could be orientated in developing the “hard” skills such as working with various technologies, or it could be orientated in developing the “soft” skills such as communication, leadership, management etc.

The professional training can contribute to the effectiveness of the organization in many ways:¹¹

- introducing the employees with the ongoing changes in the legislation related to their work;
- enabling the employees to perform tasks efficiently;
- improving relations and problem solving;
- providing long-term orientation to increase the capabilities of the employees in the organization.

The professional training is considered as a cost to the organization. However, the research has shown that the professional training is necessary in the dynamic environment on the open market. In that purpose, the organizations began to increase their budgets for the professional trainings.¹²

C) The information technology as a factor of knowledge management implementation and effectiveness

Nowadays, the most commonly used words, as in a literature, as well as in everyday speech, is the information technology. The importance of the information technology for the development of the society is immeasurable. Humans developed the technology in order to satisfy their own needs, and by developing the technology they developed the whole society.

Whether it comes to expertise, procedures or equipment, technology is involved in any activity that creates new value. Any activity that creates new value uses a technology which enables combination of the human resources and material inputs to produce an output.

Technology is one of the crucial factors of the knowledge management implementation. Technology facilitates the creation,

¹¹ Mathis R., Jackson J. (2008) “Human resource management” 13th Edition, Thomson South-Western, p.260.

¹² Tyler K. (2005) “Training Revs Up” HR Magazine, April, p.58-63.

transfer and retention of the knowledge in organizations. However, it should not be forgotten that the main holders of knowledge in organization are the human resources, while the technology is only in service of facilitating the knowledge management process. The real value for organizations occurs when the conditions that will enable people to create and share knowledge, are created.

The information technologies can also strengthen the cooperation and communication between the employees in the organization.

The information technologies are only a tool for the knowledge management realization and the process should be based on direct, immediate contact between the employees, not rigorously on reports and databases.¹³

Certain organizations develop software to encourage social interaction in organizations in order to establish the exchange of the knowledge in the organization. Networks, forums involving experts and videoconferencing are just some of the information technologies that are available to managers for knowledge management.

The knowledge management implementation and effectiveness on the telecommunication market in the Republic of Macedonia

In their efforts to accept the paradigms of the developed and successful companies, Macedonian enterprises should not disregard the fact that the modern knowledge based economy and the open market set the knowledge management as a key imperative and the factor of productivity and efficiency.

In order to examine the significance of the crucial factors of knowledge management concept implementation and effectiveness, the research survey is referring to the telecommunication market in the Republic of Macedonia. The telecommunication market is dynamic and the technological changes creates a complex environment.

The research was conducted in 10 companies, to a sample of 100 respondents – employees in these companies. The majority of respondents are between 26 and 36 years old, followed by respondents between 36 and 45 years old with 25%. 7% of the respondents who

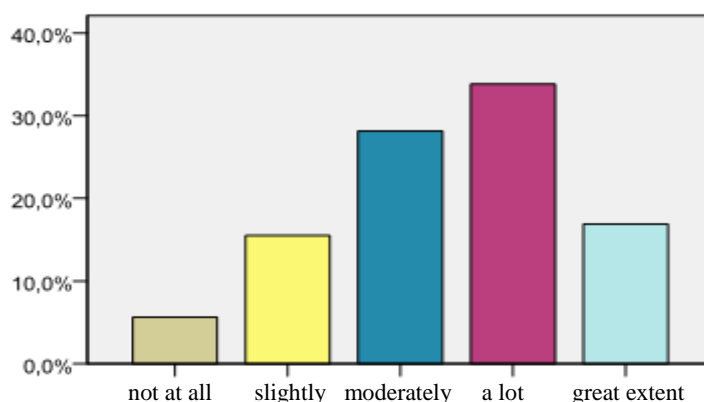
¹³ Egbu O. Ch., Botterill K. "Information Technologies for Knowledge Management: Their Usage and Effectiveness", [<http://www.itcon.org/2002/8/paper.pdf>] (20.01.2013)

answered the questionnaire are 25 years old, and only 3% of the respondents are between 46 and 55 years old, which indicates a relatively young population working in the organizations that are the subject of this research.

Regarding the qualification of the employees, the majority of the respondents are highly educated – 63%, and the percentage of those who have completed their master studies as well, is also high – 30% of the respondents. Only 7% of the respondents have completed their secondary school education.

The survey results indicate that the impact of the process of globalization and the open market has intensified the competition on the telecommunication market in the Republic of Macedonia. The majority of respondents or 51% answered that the globalization has greatly intensified the competition on the open market, while 27% of the respondents answered that the globalization has moderately intensified the competition. Only 7% of the respondents believe that the competition on the open market is not intensified at all. This indicates the fact that the majority of the employees are aware of the changes taking place on the market, as a result of the processes of globalization.

Chart 1: The impact of the globalization on the telecommunication market competition in the Republic of Macedonia

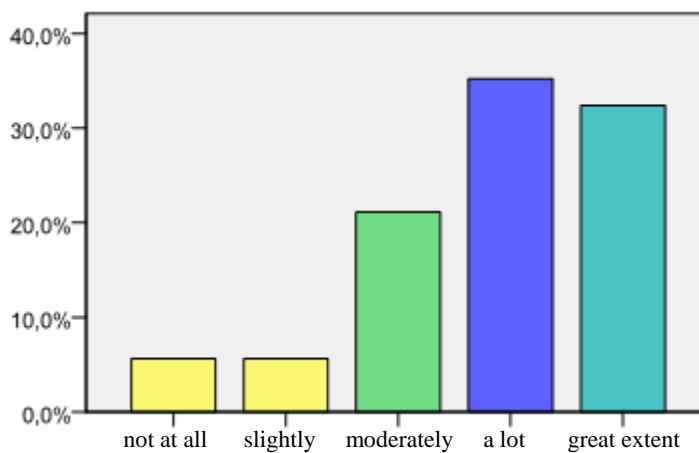


Source: Own research

Regarding the knowledge management as an important factor for acquiring competitive advantage on the telecommunications market in the Republic of Macedonia, two-thirds of the respondents answered that an appropriate knowledge management concept is especially important

for acquiring competitive advantage. 22% of the respondents believe that the knowledge management concept has moderate influences, while 6% of the respondents answered that the influence is insignificant. The results indicate the importance of knowledge management in order to acquire competitive advantage on the telecommunication market in The Republic of Macedonia.

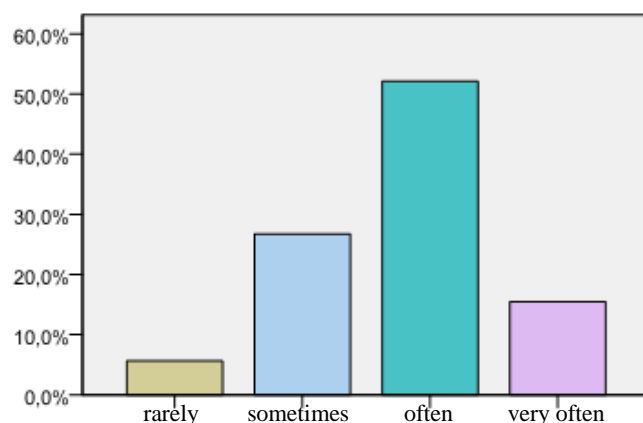
Chart 2: Knowledge management as an important factor for acquiring competitive advantage on the telecommunication market in the Republic of Macedonia



Source: Own research

The implementation of the knowledge management depends on the activities undertaken by human resources managers in the organizations. In this respect, it was researched whether the human resources management undertakes activities in the direction of improvement of the knowledge and professional skills of the employees regarding the dynamic changes on the telecommunication market. The results show that 52% of the respondents believe that the human resources management in their organization “often” undertakes activities for improvement of their knowledge and professional skills, and 15% of the respondents answered “very often”. Only 5% of the respondents answered that the managers “rarely” undertake activities aimed at improvement of the knowledge and the skills of the employees. The majority of the respondents confirmed that the human resources management undertakes activities for the improvement of their knowledge.

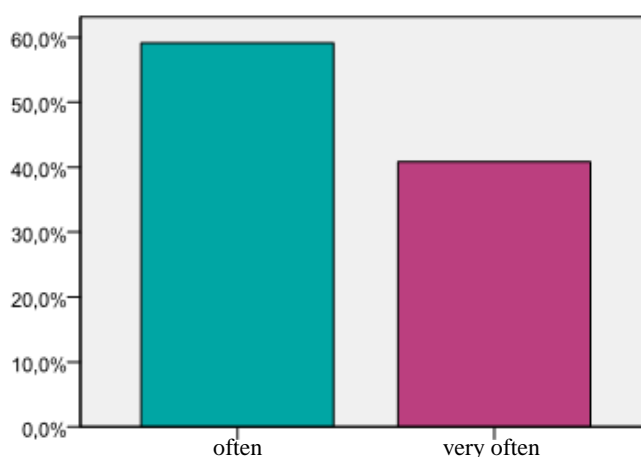
Chart 3: Human resources management and the implementation of the knowledge management



Source: Own research

The employees have been asked if they think that their knowledge and professional skills are appropriate for realization of the tasks. The results show that more than a half of the respondents – 58%, believe that they have an appropriate knowledge and professional skills which are necessary for realization of the tasks. 42% of the respondents answered that they don't have appropriate knowledge and professional skills. This indicates the need for development and improvement of the professional knowledge and skills in the organizations.

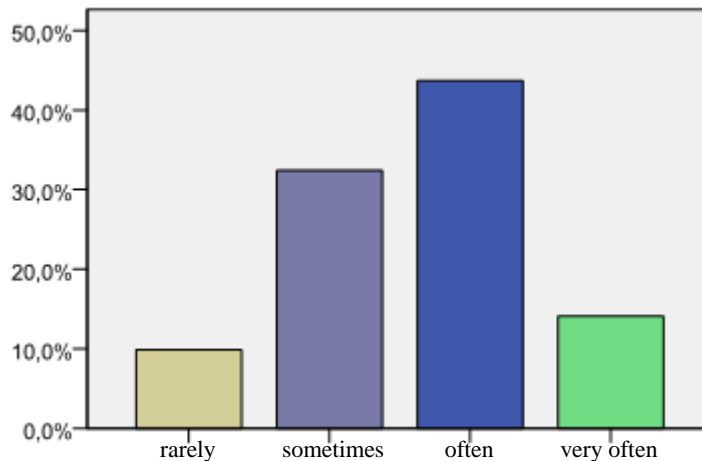
Chart 4: An appropriate knowledge and professional skills necessary for realization of the tasks



Source: Own research

Regarding the attitude of the employees and their need to constantly upgrade and improve their knowledge, as a result of the intensified competition on the telecommunication market, 49% of the respondents answered that “very often” they feel the need to improve the knowledge in their area of work and 34% of the respondents answered “often”. 12% answered “sometimes”, and only 5% of the respondents answered “rarely”. The results show that the majority of the employees are aware of the need to constantly improve and upgrade their personal knowledge, which positively adds to the activities undertaken by managers in this direction.

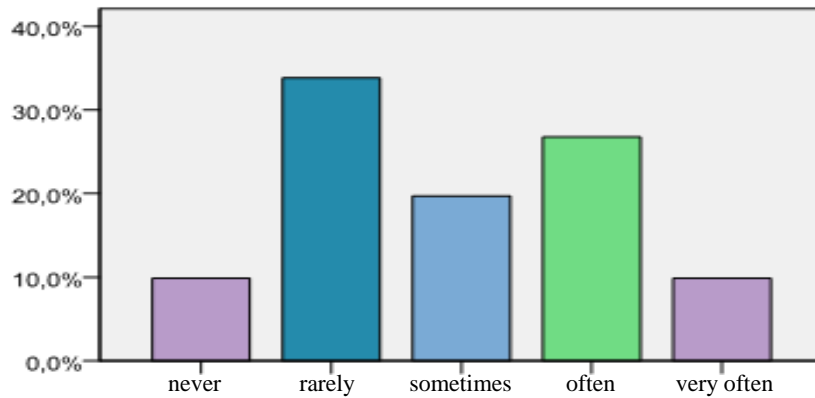
Chart 5: Trainings in purpose of the organizational knowledge improvement



Source: Own research

Due to the conditions imposed by the open market, the interest of the employees to attend training outside the domain of their profession was examined. 26% of the respondents answered that they “often” attend such training and 10% answered “very often”. 20% of the respondents answered “sometimes”, 34% of the respondents answered that they “rarely” attend training outside the domain of their profession and 10% of the respondents answered “never”. This indicates that the employees don’t recognize the need for personal improvement of skills and knowledge outside the domain of their profession.

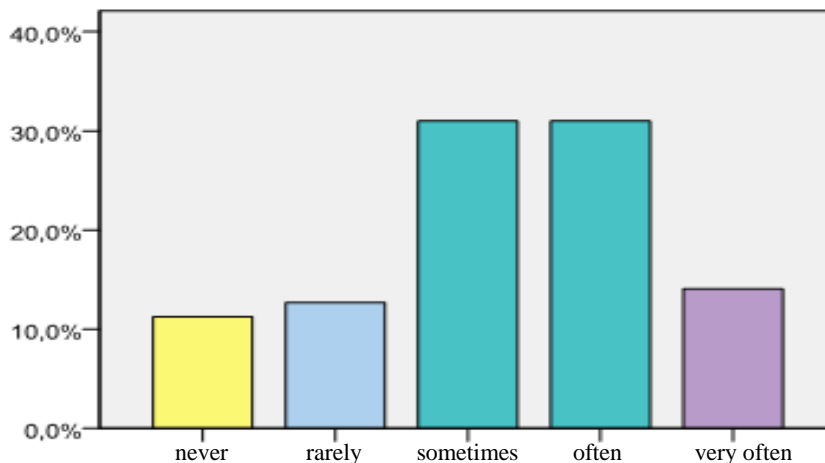
Chart 6: The interest of the employees to attend training outside the domain of their profession



Source: Own research

Regarding the activities undertaken by managers related to the organization of adequate employee training, 15% of the respondents answered that the managers organize training “very often” and 30% answered “often”. 30% answered that managers organize training “sometimes”. This indicates the initiative of the management towards development and improvement of the knowledge and the skills of the employees by appointing them to attend training.

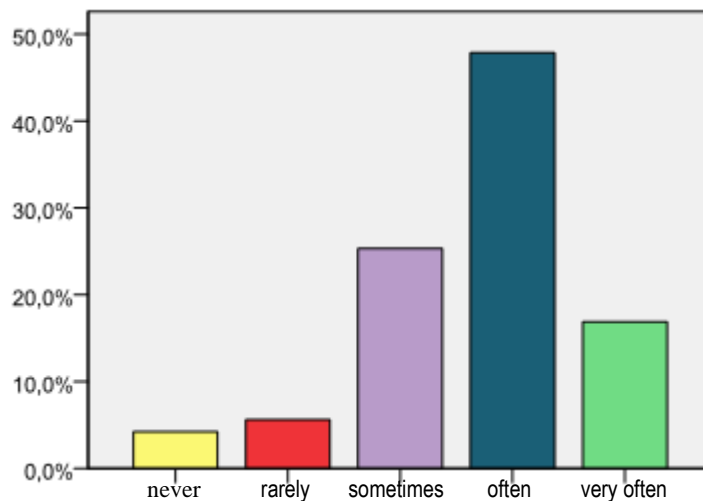
Chart 7: The activities undertaken by managers related to the organization of appropriate trainings



Source: Own research

Considering the organizational culture as a factor of the knowledge management implementation and effectiveness, it's been researched if the organizational culture motivates the employees to upgrade their professional knowledge. Results show that more than a half of respondents – 48% answered “often” and 18% answered “very often”, said that organizational culture motivates them to upgrade their professional knowledge. 25% of respondents answered “sometimes”, 5% answered “rarely” and only 4% of the respondents answered “never”. The results show that most of the employees think that the organizational culture has an influence on motivation to upgrade their professional knowledge.

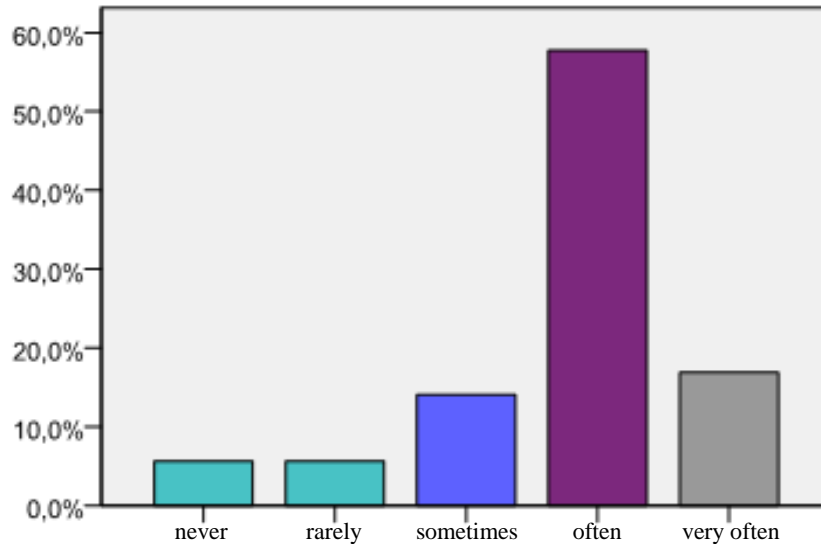
Chart 8: The organizational culture as a motivation factor for employees to upgrade their professional knowledge



Source: Own research

Having in mind the organizational culture, it's been researched whether the organizational culture has influence on the employees to share their knowledge with their colleagues in the organization. According that, even 57% of the respondents answered that the organization culture “often” has influence on them to share their knowledge in the organization and 18% answered “very often”. 15% of the respondents answered “sometimes” and 5% answered “rarely” and “never”.

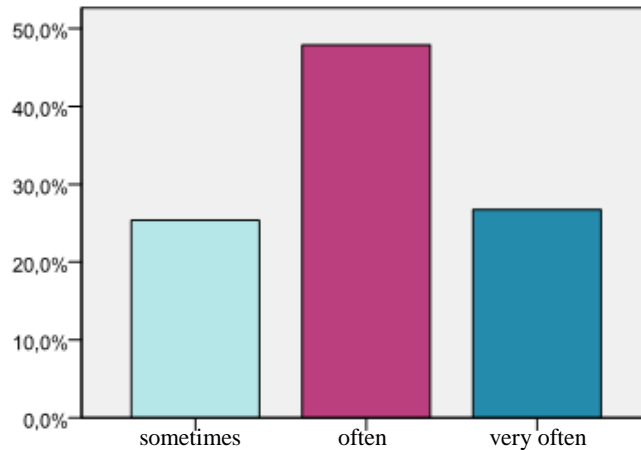
Chart 9: The influence of the organizational culture on the employees to share their knowledge in the organization



Source: Own research

The information technology is considered as one of the crucial factors of the knowledge management implementation and effectiveness. According to that, the most of the respondents – 48% answered that the information technology “often” helps them to improve their knowledge and 27% answered that the information technology “very often” helps in improvement of the professional knowledge. 25% of the respondents answered “sometimes”. It’s interesting that none of the respondents answered “rarely” or “never” which indicates that the respondents (employees) are aware of the importance of the information technology in the implementation and the effectiveness of the knowledge management concept.

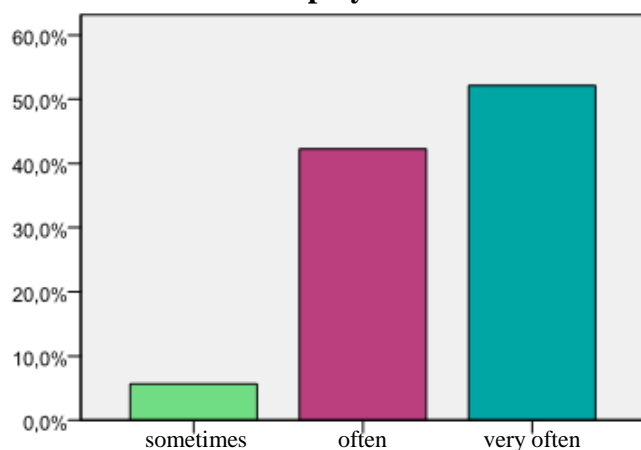
Chart 10: The importance of the information technology in the improvement of the professional knowledge



Source: Own research

The employees were asked if the information technology helps them to be more effective in their jobs. The results show that even 50% of the respondents answered that the information technology “very often” helps them to be more effective, 43% of the respondents answered “often” and only 7% answered “sometimes”. None of the respondents answered that the information technology “rarely” or “never” helps them to be more effective, which indicates the significance of the information technology on the effectiveness of the employees.

Chart 11: The influence of the information technology on the effectiveness of the employees



Source: Own research

The results show that the respondents (employees in the organizations on the telecommunication market in the Republic of Macedonia) are aware of the importance of the knowledge management in the current conditions on the market. That is why managers (human resources managers) undertake activities in order to enhance the professional knowledge of the employees by organizing professional trainings.

To implement the knowledge management, it's important that the organization has appropriate organizational culture. Also the organizational culture influences on the employees to upgrade and to share their knowledge in the organization.

The results from the survey show that the information technology is considered as one of the crucial factors in the implementation and effectiveness of the knowledge management. The employees responded that information technology helps them in improvement of the professional knowledge and influence on their effectiveness.

Conclusion

Considering the changing and unpredictable modern business on the open market and the struggle for conquering competitive advantage, companies are intensely focusing on the knowledge they possess. Developing the necessary knowledge within the organization, requires a focused combination of the knowledge and the abilities of all the participants in the management process – people, technologies and processes.

In this respect, knowledge management is considered to be a strategy which can meet the new conditions on the open market and can make the organization more competitive. The implementation and the effectiveness of this concept depends on several crucial factors such as organizational culture, human resource management and information technology.

The technological changes and the complex environment are extremely important in the telecommunication market. Also the legislation has opened the market and stimulates the competition. Regarding the dynamic changes on the telecommunication market the knowledge management is recognized as a strategy for acquiring competitive advantage. Considering the crucial factors of the knowledge

management implementation and effectiveness, the results show that the use of this concept depends on the activities undertaken by human resources managers in the organizations. Managers have to take activities in order to improve the organizational knowledge and professional skills of the employees.

The employees in these companies are aware of the need to constantly improve and upgrade their knowledge. The results show that the employees are interested in improving their knowledge in the domain of their profession, but they don't recognize the need to upgrade knowledge outside the domain of their profession. Having in mind that, managers should motivate the employees to improve their knowledge and skills outside of their professional specializations.

Also, the knowledge management implementation and effectiveness depend on the organizational culture of the organization. In this respect, organization has to have knowledge orientated organizational culture which will motivate the employees to improve and upgrade their professional knowledge and also to share it with others in the organization.

The results of the research confirm the importance of the information technology as a crucial factor of knowledge management implementation and effectiveness. The respondents said that the information technology helps them to improve, share and retain the professional knowledge.

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THE ROLE AND IMPORTANCE OF INNOVATION IN BUSINESS OF SMALL AND MEDIUM ENTERPRISES

Abstract:

Small and medium enterprises (SMEs) have central role in the global economy as a result of their key features – SMEs are dynamic, easily adaptable and flexible. Today, SMEs are considered to be one of the key driving forces of the economic growth and job creation. Around 90% of all businesses in the global economy are SMEs; their share in total private sector employment is between 61%-81%. One of the main features of the SMEs is the ability for producing innovations. Modern growth theories acknowledge the role of innovation as central to enhancing growth and productivity. Innovations are considered to be the instruments by which the entrepreneur creates new products and augments the current products.

This paper will try to examine the importance of innovation and innovative activities in SMEs. Additionally, the paper will explore some specifics of SMEs, concept of innovation, innovation types and determinants of innovation, as well as the obstacles to innovation faced by the SMEs.

Key words: innovation, innovative activities, small and medium enterprises, competitiveness.

JEL classification: O36, L25, L36

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Introduction

There are several reasons that explain the importance of the SMEs in the process of economic growth. Very often SMEs can perform successful diffusion of the latest technologies (e.g. biotechnology). In addition, SMEs are able, more effectively, to meet the needs of a relatively small, but specialized, markets. SMEs have positive impact on the economic growth and competitiveness of the country because of their flexibility, adaptability to market changes, as well as because of their impact on employment and knowledge sharing. They can relatively quickly and without shocks change their productions programs and conquer the production of highly profitable products, as well as give up the production of unprofitable products or products for which there is no demand on the market. All this, together with relatively lower production costs, higher labor productivity, lower transportation costs and more efficient management as compared to big enterprises justifies capital investment aimed towards supporting growth of the SMEs.

SMEs' activities have large contribution in the production and growth processes in all developed economies. This role of the SMEs is connected to the fact that SMEs' business initiative very often results in innovation, which, on the other hand, is one of the key sources for economic growth and prosperity in the modern economies. The adoption and implementation of economic policies in economies where the business environment evolves according to the needs of small and medium entrepreneurship takes into account how new policy measures will affect small and medium entrepreneurs, given the fact that they are more flexible, but also more sensitive to changes in the business climate as compared to the large enterprises. On the other hand, SMEs have several innate features resulting from the size that distinguishes them from the large enterprises, such as: fewer employees, less work, fewer customers and mostly operate on local market.

Innovation is particularly recognized feature of the SMEs because of their flexibility to the market changes. Innovative activities and SMEs are closely related – SMEs have to undertake innovative activities if they want to stay competitive, to develop, and to ensure long-term existence, in a dynamic and competitive environment. Having all this in mind, the main objective of this article is to discuss some of the key features of the SMEs, the definition, types and determinants of innovation and the link

between innovation and SMEs, with a special emphasis on the impact of innovation on SMEs competitive ability.

Specific features of the SMEs

Numerous definitions for enterprise division can be found in the literature. But companies are usually being divided according to their size to micro, small, medium-sized and large enterprises. The definition of the size of enterprises is usually determined on the basis of several criteria: the legislation of each country, number of employees, annual turnover, value of assets and net profit. The classification of the enterprises in the Republic of Macedonia in the Company Law has been prepared in compliance with the definition of the European Union.²

Micro, small and medium-sized enterprises are the engine of the European economy. They are a key source of employment, creation of an entrepreneurial spirit and innovation in the European Union and therefore, they are a necessity for strengthening competitiveness and employment growth. The new definition of SMEs, which entered into force on January 1, 2005, represents an important step for improvement of the business environment for SMEs and it is aimed towards fostering entrepreneurship, investment and growth.³

The common definition of SMEs at EU level is of critical importance because it is used as a basis for decision-making in the EU legislation, concerning state aid and structural funds. This means that different categories of SMEs (micro, small and medium-sized enterprises) must be defined in a way that ensures economic fairness, i.e. that provides legal safety to companies, while allowing easy application to the administrative systems of the Member States.⁴

Micro, small and medium-sized enterprises are socially and economically important because they represent 99% of the total number of enterprises in the European Union, providing around 90 million jobs

² Petkovska, T., Nonkulovska, P. A., *The importance of small and medium enterprises for economic growth in Western Balkan countries*, International Conference SMEs development and innovation: building competitive future of South-Eastern Europe, Ohrid, Macedonia, October 3-4, 2014, p.612-613.

³ http://www.minpo.hr/UserDocsImages/Vodic_SME_definicija%20final_sudski_tumac.pdf (accessed 10.07.2014)

⁴ Ogawa, E., *Upravljanje malim preduzecima danas*, Evropski centar za mir i razvoj (ECPD) Univerziteta za mir Ujedinjenih nacija, Beograd, 2001, p.111-113.

and have a great contribution to the development of entrepreneurship and innovation.⁵ In more details, the importance of the SMEs for the European Union as a whole comes from the following features of the SMEs: SMEs have faster speed of development compared to large enterprises; SMEs are employing more than two thirds of the total number of employees; most business activities in Western Europe are created by the SMEs; over a longer period there is an increasing trend of the number of jobs generated by SMEs, whereas the job generation process in large enterprises shows a declining trend; the role of small businesses in labor-intensive activities is more important compared to large enterprises; average European SME employs five workers; one third of the SMEs are growth oriented; the average age of new entrepreneur is 35 years; one of five companies are established and lead by entrepreneurs.

On the other hand, SMEs face several constraints in terms of organization, management, financing, competition, efficiency, growth and development as compared to large enterprises. Namely, in large companies with many employees organization and division of labor is being easily organized, which is not the case with small companies where an employee must perform several tasks. Small companies may have a significant role in the foreign trade of a country as subcontractors to large multinational enterprises and companies. Their comparative advantage is that they are flexible, can quickly adapt to changes and meet market demands.⁶

SMEs, as well as the large enterprises have their own advantages and disadvantages. The way in which SMEs outweigh their disadvantages and use their advantages depends on the environment that surrounds them. As the most important advantages by which SMEs are easily differentiated from the large enterprises are the following:⁷

- Personalized service: SMEs compared with large companies, have the advantage of offering a personalized service, for example, can more easily ensure that the same worker attends to a customer during the checkout process.

⁵http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/index_en.htm (accessed 20.05.2014)

⁶ Dostic, M., *Menadzment malih i srednjih preduzeca*, Ekonomski fakultet Univerziteta u Sarajevu, Sarajevo, 2003, str.23-34.

⁷ The Advantages of SMEs, <http://www.unicycle4kids.org/business-tips/the-advantages-of-smes.php> (accessed 20.01.2015)

- Best Customer Service: SMEs tend to be closer to their customers which allows them to better understand customers' needs, tastes and preferences, and subsequently, SMEs can provide better care for customers, for example, better advice on shopping.
- Better access to market information: the market size and proximity to customers, allows SMEs to better understand the targeted audience and be aware of the new changes that arise in the market.
- Greater flexibility to adapt to market changes: SMEs have a lean structure and form here the advantage of faster and better adaptability to new needs, tastes and preferences of consumers.
- More flexibility to meet needs, tastes and preferences: SMEs also have the advantage of being able to better match the particular requirements of its customers, or make concessions when it requests them.
- Increased capacity for innovation: SMEs have the advantage of being able to innovate constantly, to bring new products, services or promotions to the market without running too much risk.
- Increased capacity of reaction, due to its simple, less rigid structure than large companies. In other words, SMEs have to adapt quickly to market changes, to meet particular needs, or to innovate.
- More rapid and timely decisions, due to its simple and low hierarchical structure: SMEs have the ability to make faster and quicker decisions than large enterprises, which allows them to have greater capacity to reactions.
- Increased ability to correct errors: the size and the structure of the SMEs allows for quicker correction of mistakes, for example, SMEs can have relatively fast reaction in case of product failure, bad campaign, or a bad choice target audience.
- Better handling of complaints: SMEs can better meet customer complaints or critiques, for example, can ensure that a single worker can decide on a reaction connected with the complaints of a given customer i.e. he doesn't have to consult several employees.
- Increased worker commitment: because of the relatively simple organizational structure and no clear division of the responsibilities in the SMEs, individual workers often contribute significantly in the process of developing and improving the business by giving new ideas and suggestions. This, in turn, makes workers more useful and therefore, more identified and committed.

- Increased worker productivity: less hierarchical structure of the SMEs allows for establishing close, personal relations between the workers and the employer and/or the senior officers of the company, which makes workers more motivated and therefore, increases workers productivity.

In addition SMEs have certain disadvantages compared to large companies which usually are arising from the actual size of enterprises. The main disadvantages of SMEs can be listed as:⁸

- Possibility for a rapid bankruptcy in respect to large enterprises. It is being statistically proven that 30-40% of small companies cease operations within three years after establishment, and even 60% in a period of eight to ten years. Due to the low degree of division of labor, productivity in small company is relatively low, since one employee can perform various operations and activities, thus reducing the possibility of improvement and narrow specialization.

- The insufficient information is distinctly marked weakness of SMEs.

- Wages in SMEs are generally smaller compared to large companies where workers receive special contributions throughout the year and where workers' rights are being protected by collective agreements and trade unions. Also, tax evasion is greater in SMEs. For example, in order to avoid tax obligations to the state, often one part of the workers' salary is being paid directly, "on hand", which is harmful for the country, as well as for the employees themselves.

- The risk of job loss is significantly greater in SMEs, compared to large enterprises.

- SMEs are not competitive on the international market, unless they have joint ventures or act as subcontractors of large enterprises (the so-called economy of scale).

SMEs differ among themselves in the organization of work, organizational structure and the manner of management. While for small enterprises informal organization and simple organizational structure is characteristic, the structure of medium-sized enterprises is more formalized with several levels of hierarchy, defined job positions, clearly established rules and procedures, formalized system of control etc.

⁸ Шуклев Б., *Менџмент на малиот бизнис*, Економски факултет Скопје, Скопје, 2006 година, p.35-38.

Concept of innovation and innovation types

There are many definitions for the concept innovation. However, before defining what innovation means, one should make clear distinction between the terms - innovation, invention and creativity. The differences between creativity, inventiveness and innovation, as emphasized in the modern literature, are integral elements of the entrepreneurial process.

Creativity refers to the ability to create new content or process with a certain combination of the current resources i.e. factors of production. Creativity is the basis for innovation, whereas the innovation is a result of being creative. *Invention or inventiveness* is the process of creating something new. Invention, same as innovation, is a result from the creativity process; however, the appearance of an invention is usually considered a random event, luck or coincidence. *Innovation*, on the other hand, is associated with definite marketing of a new product, service or technological process, all of which are results from the inventiveness.

According to Joseph Shumpeter, innovation is the introduction of new goods, new methods of production, the opening of new markets, the conquest of new sources of supply and the carrying out of a new organization of any industry⁹. Peter Drucker connects innovation with the entrepreneurship. Innovation is specific instrument of the entrepreneurship which helps the entrepreneurs to exploit changes, an opportunity for starting new business activities, or introducing new products and services. In addition, Drucker emphasizes that knowledge based innovation is the „star of the entrepreneurship”¹⁰. Knowledge based innovation differs from all other types of innovation by two main features – the time needed for transformation of the knowledge based innovation into a product is longer and knowledge based innovation are result of a combination of many different types of knowledge i.e. they are not based on one specific type of knowledge. Porter defines knowledge based innovation as an attempt „to create a competitive advantage by perceiving or discovering new and better ways of competing in an industry, and bringing them to the market.”¹¹ Organization for Economic

⁹ <http://innovationzen.com/blog/2006/11/17/the-definition-of-innovation>
(accessed 20.10.2014)

¹⁰ Drucker P. F., *Innovation and Entrepreneurship*, Harper and Row Publishers, New York, 1985, p.75.

¹¹ Porter, M. E., *The Competitive Advantage of Nations*, New York, MacMillan Press, 1990, 8.45.

Cooperation and Development (OECD) in 2005 gave a general definition of innovation: *An innovation is the implementation of a new or significantly improved product (goods or services), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations.*¹²

Creativity is the process of generating ideas, whereas innovation is a process of transforming ideas into new products, services or processes¹³. Not all creative ideas are necessarily transformed into innovation, but, there is no innovation without creativity. Creativity and inventiveness, as the basis of innovation, are characteristics not only of the entrepreneur, but also of the company, which can act as leader in the innovation process by stimulating innovative and creative activities.

OECD classifies the sources of ideas as internal and external sources.¹⁴ Internal sources of ideas are: research and development; top management; market; production; monitoring of technological development and internal factors that stimulate innovation. External sources are listed as: purchase of technology; cooperation with universities and institutes; cooperation with customers and consultants; scientific and technological literature; patents; commercial literature; fairs, exhibitions, symposia; public programs for support of innovative activities; competitive situation; training; collaboration with suppliers and other companies and legislation, rules, regulations, standards.

Several classification of innovation can be met in the literature. One of the oldest is that of Joseph Shumpeter (1934) who classified innovation in five distinct types:¹⁵

- *introduction of new products,*
- *introduction of new methods of production,*
- *opening of new markets,*
- *development of new sources of supply for raw materials or other inputs, and*
- *creation of new market structures in an industry.*

¹² OECD, Eurostat. Oslo Manual - *Guidelines for Collecting and Interpreting Innovation Data*, 3rd Edition. OECD Publishing, 2005, p.46.

¹³ Tidd J., Bessant J., *Innovation and Entrepreneurship*, John Wiley and Sons Ltd, England, 2007, p.40.

¹⁴ *OECD Proposed Guidelines for Collecting and Interpreting Technological Innovation Data*. Paris, OECD Directorate for Science, Technology and Industry, Industry Committee, 1991, *Tehnologija i inovacije*, 69.

¹⁵ Oslo Manual - *Guidelines for Collecting and Interpreting Innovation Data*, Publication of OECD and Eurostat, 3th Edition, 2005, p.29.

According to OECD, four types of innovations are distinguished: *product innovations*, *process innovations*, *marketing innovations* and *organisational innovations*.¹⁶

Product innovation is the introduction of a good or service that is new or significantly improved, with respect to its characteristics or intended uses. This includes significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics (examples for product innovations are: new materials, such as teflon and kevlar; instant photos; camera in a mobile phone; margarine without cholesterol; GPS etc.)

Process innovations the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software (examples for process innovation are: introduction of new equipment—laser; sensors; automated equipment; digitization of the printing process).

Marketing innovation is the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing (examples for marketing innovation are: introduction of director exclusive sales; use method variable cost of goods; promotion of a new trade mark; marketing of a new product).

Organizational innovations the implementation of a new organizational method in the firm's business practices, workplace organization or external relations (examples for organizational innovation are: changes in the organization of jobs; the formation of teams doing business improvement; introduction of quality standards etc.).

Another important classification, besides the above mentioned, is the one that divides innovation by the degree of innovativeness¹⁷ on incremental and radical innovation. *Incremental innovations* include progressive, continuous and cumulative innovation that does not include new scientific components to improve the existing technology. They refer to the incremental improvement of existing technology or existing production on the market, or represent a modified version of an existing product or process. *Radical innovations* refer to introduction of completely new products, services, new systems of production and

¹⁶ Ibid, p.47-52.

¹⁷ AleixoGonçalo G., Tenera Alexandra B., *New Product Development process on High-Tech Innovation Life Cycle*, 2009, www.waset.org/journals/waset/v58/v58-135.pdf (accessed 20.11.2014)

distribution that make existing products and services uncompetitive. These innovations may include new technologies or are based on combining existing technologies adapted for new applications.

Today, the ability to innovate is one of the most important factors for creating competitive advantages and success of any enterprise. Innovation is necessary for survival, growth and development of companies and for enhancing the competitive position of the company. Innovative activities allow companies to establish status of a „temporary monopol” and receiving additional, extra profit on that basis.

Innovative capacity varies from company to company and it is determined by a larger number of factors that can promote or constraint the innovation process in the enterprise. The following determinants of innovation can be found in the literature:¹⁸

- *The role of the state in the process of introducing innovations.* Many empirical studies find positive relationship between government support and innovation activities – government supports stimulates private investment and innovation.

- *The role of the cooperation.* The results of research studies usually confirm the positive impact of cooperation on innovation. Cooperation is more common between smaller companies – cooperation is associated with risk sharing and cost division which are more important for smaller enterprises.

- *The degree of decentralization in the enterprise.* Higher degree of decentralization, together with more informal organizational structures results in more innovative activities.

- *The size of the enterprise.* Larger companies have better access to capital markets and more own funds to finance risky and uncertain innovation projects, compared with small companies. However, innovative activities in larger companies may be negatively affected because of their tendency to be more bureaucratic and hierarchical. Also, the larger the company the looser is the managerial control on innovative activities.

¹⁸ More explanations in: Петковска, Б. Т., Петковска, А., *Малите и средни претпријатија и иновациите во економијата базирана на знаење*, Зборник на трудови од конференција: Предизвиците на науката во економија базирана на знаење - состојби и перспективи, Економски институт - Скопје, Скопје, 2012, p.322-324.

- *Economic activity of the company.* Results from the survey research (Community Innovation Survey)¹⁹ conducted by the Statistical Office of the European Union (Eurostat) confirm that firms working in the manufacturing industry innovate more than the companies in the service sector – this result is valid for 26, out of 28 countries which are included in the survey.

- *Training of employees.* Human capital is an important determinant of innovative activities. Besides knowledge, skills and expertise gained through the formal system of education, continuous investment in human capital, through supporting life-long learning and training have positive impact on the innovation process in the company.

- *The market.* The market as a determinant of innovation is particularly important for export-oriented enterprises. Namely, companies that sell their products or services on foreign markets are under strong competitive pressure; therefore, in order to survive, they must continually produce innovation.

- *Internal communication in companies, the belief that innovation is important and the propensity to risk* are emphasized as additional important drivers of innovation in the research of Wan, Ong and Lee.²⁰

The innovation ability of an enterprise is not solely dependent on its internal characteristics; the organizations, institutions, regulations and the overall business ambient in which the company operates also influence the capacity for producing innovation. From here, the innovation capacity of a country is complex system that has many different actors. At the macro level, the innovation process in the country is determined by the quality of the interaction between research and development, the demand for innovation, absorption capacity and diffusion of knowledge and innovation through market and non-market cooperation.²¹ In other words, the degree of innovativeness of the country is a result form the quality of the interactions between the individual components necessary for developing innovative capacity.

¹⁹ Eurostat, European Commission, *Science, technology and innovation in Europe*, Eurostat pocketbook, ISSN 1830-754X, 2011 edition.

http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-30-09-148/EN/KS-30-09-148-EN.PDF (accessed 10.01.2015)

²⁰ Wan, D., Ong, C., H., Lee, F., *Determinants of firm innovation in Singapore*, Technovation, National University of Singapore, Singapore, 2005, p.265.

²¹ Stručna skupina: *Razvoj inovativnosti i tehnologije*,

[http://www.azra.hr/documents/46%20-](http://www.azra.hr/documents/46%20-%20Razvoj%20inovativnosti%20i%20tehnologije.pdf)

[%20Razvoj%20inovativnosti%20i%20tehnologije.pdf](http://www.azra.hr/documents/46%20-%20Razvoj%20inovativnosti%20i%20tehnologije.pdf) (10.02.2015)

Innovation activities in SMEs

Entrepreneurship and innovation are recognized characteristics of SMEs. Namely, to ensure growth, development and competitive market advantage, SMEs must be innovative and creative. SMEs are the center of initiatives where innovation can be initiated and where new ventures begin. In theory and practice, many of today's new products are result of the innovative activity of the small enterprises. One of the critical factors that explain the higher propensity for innovation of the SMEs is the shorter time period needed for commercialization of the innovation. This is due to the fact that SMEs are usually concentrated on one market segment.²²

Joseph A. Schumpeter was among the first authors who connected the term entrepreneur with innovation, emphasizing the innovation as a very important feature. According to him, an entrepreneur is a person who initiates change through innovation and new opportunities, while entrepreneurship is the process of „creative destruction” through which current products or methods of production are destroyed and replaced with new ones.²³ Hence, innovation as an important characteristic of the entrepreneurial activity is related to the discovery of new markets, introducing new organizational structure, permanent modification technology, introducing new technologies, discovering new sources of energy, introduction of new products and services, modifying current products, discovery of new resources and introducing new working methods.

Based on a survey data, around 30% to 60% of the SMEs in the OECD countries are characterized as innovators in a broader sense.²⁴ Although, they are less likely to conduct research and development (R&D) as compared to larger firms, they are more likely to undertake innovative activities through creating or modifying products or services to meet new market demands, introducing new organizational

²² Петковска, Б. Т., *Иновациите – значаен фактор за унапредување на конкурентноста во малите и средни претпријатија (МСП)*, реферат на Научен собир, Зборник на трудови "Претприемништво – иновации и конкурентност", Економски институт - Скопје, Скопје, 2008, p.22.

²³ Lajovic, D., Vulic, V., *Tehnologija i inovacije*, Ekonomski fakultet, Podgorica, 2010, p.59.

²⁴ OECD: Small and medium sized enterprise: Local Strenght, Global Reach, <http://www.oecd.org/dataoecd/3/30/1918307.pdf> (accessed 15.10.2014)

approaches to enhance productivity, or developing new techniques to expand sales.

According to another research on innovation and SMEs²⁵ small businesses' sector provides a significant contribution to the technological and economic development. In addition, growth and development of large companies' brands is the result of innovations implemented in the phase when these companies have been small companies; today each large company has once been a small company and due to that reason, it is quite interesting to study its historical development; small companies lack the capacity to implement basic researches, but are very suitable for applied researches; small companies do not have their own research and development units, laboratories and pilot units, and do not possess a lab test of the quality of materials and products; in small companies there is high motivation of employees through innovation to solve numerous problems in current operations and to ensure market success.

The fact that innovations stimulate growth and development of the SMEs has been established in theoretical literature and confirmed in empirical studies. This finding is also valid in the case of Macedonia. Namely, Petkovska (2011) has conducted research on a sample of 480 SMEs and found evidence that the introduction of innovation encourages growth of SMEs in Macedonia²⁶. Moreover, the research suggests that the ability of an enterprise to innovate will be greater if it is larger, if it invests in training and education and if the company is an exporter. Economic sector where the company works is also important for the probability of innovation – the probability of introducing innovation is higher if the company is working in manufacturing.

²⁵ US Small BusinessAdministration,
http://www.apeiron-uni.eu/apeironinenglish/Centar_za_izdavacku_djelatnost/Radovi%20u%20PDF-u/Magistarski%20PDF/Mirko_Okolic.pdf
(accessed 21-07.2014)

²⁶ More explanations in “Innovations as a factor for growth stimulation of SMEs with special emphasis on the Eastern and Western area of the Republic of Macedonia”, Msc.thesis, Aneta Petkovska, Skopje, Institute of Economics, 2011, pp.111-121.

Table 1: Advantages and constraints for the innovative activities of SMEs

A d v a n t a g e s	S h o r t c o m i n g s
M a n a g e m e n t	
Absence of bureaucracy; accepting greater risk; fast decision making	Absence of formal and management techniques and skills
M a r k e t I n g	
Market proximity enables quick response to changing market conditions; able to dominate in niche markets	Little or no market power; poor distribution and logistics; spread to other markets can be very expensive
O r g a n i z a t i o n	
Less routine and inertia	Uncertainty and costs
F i n a n c e	
More efficient R & D, innovation rather cheaper	Difficulties in procuring external funding, relatively high cost of capital, reliance on short-term loans; inability to avoid risk
G r o w t h	
Potential for growth through market niches or strategy of differentiation	Difficult to procure funds for growth; growth entrepreneurs are often unable to manage with growth
H u m a n r e s o u r c e s	
Flat management structure	Large fluctuations, lack of formal training
T e c h n i c a l s t a f f	
Pursue a few things and are involved in the work of all sectors	Lack of specialists; insufficient competence for R & D activities
C o m m u n i c a t i o n	
Effective and informal internal communication facilitates rapid internal problem solving	Insufficient time and resources to create technological external links
I n s t i t u t i o n a l s u p p o r t	
Agency to support small businesses; advice, training assistance programs	High transaction costs for access to support centers; lack of funds to participate in programs to support; no built awareness of the importance of institutional support
R e g u l a t i o n	
Some regulations are less stringent for small enterprises	The system of patent protection is a complex and expensive for small firms
C o o p e r a t i o n	
Flexibility and rapid decision-making makes the company an attractive partner	Asymmetry of power and influence in cooperation with partners; little or no impact on the supply chain

Source: Deakins, D., Freel, M., *Entrepreneurship and small firms*, McGraw Hill, 2003, Bo Avlijas, R., *Preduzetnistvo i mneadzment malih i srednjih preduzeka*, Univerzitet Singidunum, Beograd, 2008, p.36-37.

It is obvious that SMEs have comparative advantages in innovation of some degree of technological maturity of the product and branch²⁷. At the same time, certain factors act as a constraints to the innovative capacity of the SMEs. Table1 shows the advantages and the constraints for the innovation activity of the SMEs.

SMEs have special advantages in innovation resulting from the absence of bureaucracy; flat management structure; efficiency, mostly informal systems of communication; flexibility, scalability and near the market. The common dominant or innovative advantage is the speed i.e. the time it takes to get products to market as a key factor for success, because of the shorter life cycle of the product and the emergence of imitators.²⁸ Because the time to come to market is important, speed becomes only competitive weapon. SMEs should take their innovative strengths in order to improve competitiveness. As constraints are concerned, particularly important is the lack of resources to fund innovation that significantly restricts innovation of SMEs. Financing of innovation, as a rule, is very expensive and is characterized by a high degree of risk and uncertainty.

Analyzing the common mistakes made by SMEs in their innovation activities, Kanter Rosabeth Moss suggests that, in order to increase their profits, the SMEs should undertake small, incremental innovations, instead of trying to implement major radical innovations.²⁹ This type of product innovation can serve as an effective weapon against the competition, because it stimulates the development and enlargement of the company in the short term, while protecting or improving its market position at the same time. Moss suggests introduction of so-called pyramid of innovation in three levels: high, medium and small innovations.

Innovation is essential for the growth, survival and the vitality of the modern enterprise, whereas research and development (R&D) is one of the most important sources of innovation. The result of successful R&D activity is the knowledge that it will be beneficial for both, the company and the consumer. The quality of the conducted R&D activity is positively related to the success of the innovation. Given that the

²⁷ Avlijas, R., *Preduzetništvo i mneadzment malih i srednjih preduzeka*, Univerzitet Singidunum, Beograd, 2008, p.36.

²⁸ Ibid, p.38.

²⁹ KanterRosabeth Moss, *Innovation: The Classic Traps*, Harvard Business Review, November 2006, p.82.

process of R&D is very expensive and long lasting, enterprises, especially SMEs, are often faced with the dilemma of how to organize the research and how to approach the market.³⁰

Organization and implementation of R&D is complex process. Companies, especially SMEs, face with a dilemma whether the R&D should be conducted independently or they should collaborate with other companies and undertake joint activities. Joint R&D projects are less costly and the activity can be finished relatively faster; however, it also implies results sharing and thus, smaller potential profits. Besides the set options, financially strong companies can buy ready technological solutions from other companies or research institutions.

The second dilemma that SMEs faces is connected with the performance of the market i.e. SMEs have to choose whether they should introduce themselves with fewer products and try to create greater market share (fewer products requires less research) or with more products (diversification which requires much more research activities).

Experiences in improving the competitiveness of SMEs in the developed world show that despite numerous changes and innovations, another important factor for improving the competitiveness are various strategic partnerships or alliances between companies.³¹ These partnerships are defined as managerial cooperation between different companies and they include contractual and collaborative relations between enterprises (such as joint venture, licensed contracts and contracts related to information sharing), as well as organization of joint research programs with wide range of partners: customers, suppliers and competitors from other states. In addition, despite these partnerships, SMEs should establish strong cooperation with universities, institutes and other educational institutions, as well as contacts with public agencies for SMEs' support. All this will help the SMEs in creating global corporate strategy with a complete line of products, as well as providing comprehensive services to clients worldwide. Also, strategic partnerships allow minimizing costs, strengthening technology of partners and collaborative relations in the R&D area.

³⁰ Lajovic, D., Vulic, V., *Tehnologija i inovacije*, Ekonomski fakultet, Podgorica, 2010, p.95.

³¹ *Uloga inovacija u poslovanju malih i srednjih poduzeća*
http://www.google.com/url?url=http://hrcak.srce.hr/file/112074&rct=j&frm=1&q=&esc=s&sa=U&ei=2GXsVOm3JpGKaJH3gbAG&ved=0CEcQFjAJOAo&usg=AFQjCNHaMlzfP6mbUnmQUvo3MrcSJfY_QQ (accessed 15.01.2015)

Conclusion

SMEs are the main drivers of economic development. The high degree of flexibility and adaptability to new markets enables SMEs to increase the capacity of resource utilization in the economy. In addition, they promote private ownership and entrepreneurial skills. SMEs are engines of growth in market economies, as well as in the countries in transition – SMEs activities create new jobs, increase the number of the economic entities, improve standard of living and increase GDP and competitiveness of the domestic economy.

Main advantages of SMEs are the following: flexibility to market changes, they represent an important source of innovation, easy human resources managing due to the small number of employees and direct relationship between the owner and employees, greater motivation and a high level of control. On the other hand, the disadvantages of small enterprises can be listed as: inefficiency, as a result of the high production costs per unit of product, lower sales volume, lack of specialization, greater market risk since the work is based on one or few products and difficulties in terms of providing funding.

Entrepreneurship and innovation are recognizable features of SMEs. Namely, to ensure growth, development and competitiveness, SMEs must be innovative and creative. SMEs are the center of initiatives where innovation can be initiated and where new ventures begin. Innovations represent an instrument by which the entrepreneur creates new resources and modifies the current base of resources, to increase the potential for creating wealth. Having this in mind, some authors are completely right when they state that innovation is a specific tool of entrepreneurs, i.e. a tool with which entrepreneurs develop the desired changes. In other words, entrepreneurship is the engine of innovative activities.

Due to shorter channels of communication, informal decision-making and greater flexibility, SMEs have greater opportunity for innovation than the large enterprises. Given that innovation is a prerequisite for ensuring competitiveness, in order to be innovative SMEs should: constantly review their operation and introduce innovations through creation and offer of new products and services; undertake operations on a global and local level by establishing a direct relationship with the final beneficiaries of their products and services; have a good knowledge of their market as well as of the consequences

that may arise from the undertaken actions; review its capacity for inventiveness and ability to engage partners for research and development activities, as most SMEs do not have a research and development department within the company.

Experiences in strengthening of SMEs competitiveness in the developed world have shown that despite the numerous changes and innovations occurring in companies, important factors for strengthening competitiveness are the various strategic partnerships in these enterprises and their performance in foreign markets.

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Original scientific paper

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THE INFLUENCE OF BUSINESS CLIMATE REFORMS ON INVESTMENT IN THE REPUBLIC OF MACEDONIA

Abstract

This paper deals with the business climate reforms in the Republic of Macedonia, from the perspective of the achieved progress and importance of regulatory reforms in investment decisions. The main methods used for elaboration of the paper include methods of analysis and synthesis, based on extensive review and processing of available data, as well as consultation of relevant literature. The paper focuses on the measurement of the business climate by the World Bank “Doing Business Report” comparison of the achievement of Republic of Macedonia and other Western Balkan countries, as well as views of Macedonian firms about different elements of the business climate presented into the Enterprise Survey by the World Bank. In addition, the paper provides data on investment in the Republic of Macedonia and other Western Balkan countries (for comparison purposes), in particular, data on gross fixed investment and FDI, followed by overview of the importance of the regulatory reforms for the actual investment results. The major findings of the paper confirm that regulatory reforms in the Republic of Macedonia have contributed a lot towards improvement of the business climate in the country, but investment decisions have been primarily determined by other factors, which implies the need for the country to tailor the investment policy making process towards overcoming of constraints.

Key words: business climate, regulatory reforms, investment.

JEL classification: A1, K2

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Introduction

In the past decade, the improvement of the business climate has become substantial part of the work of the governments in many countries, which has been primarily encouraged and measured by the World Bank. The annual edition of “Doing Business” reports forces governments to undertake various reforms in their respective countries, aiming towards scoring better ranking in the Reports. The Republic of Macedonia has achieved remarkable results in this sphere, evidently through the World Bank measurements. In this respect, the improvement of the business climate in the Republic of Macedonia is undeniable, but raises a question about the importance of this factor for investment decisions of the investor, domestic or foreign. In this context, the paper would focus on measurement of the business climate by the World Bank “Doing Business Report”, comparison of the achievement of the Republic of Macedonia and other Western Balkan countries, as well as views of the Macedonian firms about on different elements of the business climate presented in the Enterprise Survey by the World Bank. In addition, the paper would provide data on the investment in the Republic of Macedonia and other Western Balkan countries and discussion on the importance of the regulatory reforms for the actual investment results. The methodology used for elaboration of this paper includes methods of analysis and synthesis, based on extensive review and processing of available data, as well as consultation of relevant literature.

1. Reforms for improvement of the business climate in the Republic of Macedonia

Starting from 2007, the Republic of Macedonia has been continuously promoted as a successful reformer by the World Bank in the “Doing Business Report”. The Report published annually provides indicators for business regulation in the national economies. The data referring to the Western Balkan countries ranking in the Doing Business Report 2014 are presented in Table 1. The Republic of Macedonia has the highest overall ranking compared to the countries from the region, as well as relatively high ranking (25th position) in the total ranking of 189 economies. According to the World Bank Doing Business Report 2014,

on average around the world, establishing a business involves 7 procedures, takes 25 days and costs 32% of the income per capita in fees.³ These same procedures in the Republic of Macedonia take 2 days and cost of 1.9% of income per capita.⁴ With regards to the specific (sub)indicators, the Republic of Macedonia has outstanding results related to reforms for starting a business and getting credit (rankings 7 and 3), while it is seriously lagging behind in enforcing contracts (ranking 95), trading across the borders (ranking 89), registering property (ranking 84) and getting electricity (ranking 76). Other countries in the region have much lower overall ranking, while in terms of sub-indices, some of the countries have better scores. However, the common problems in the region include dealing with construction permits, registering property and enforcing contracts.

Table 1: Western Balkan countries' performances in Doing Business Report 2014

	Overall rank	Starting business	Dealing with construction permits	Getting electricity	Registering property	Getting credit	Protecting investors	Paying taxes	Trading across the borders	Enforcing contracts	Resolving insolvency
Albania	90	76	189	158	119	13	14	146	85	124	62
B&H	131	174	175	164	96	73	115	135	107	115	77
Croatia	89	80	152	60	106	42	157	34	99	49	98
Macedonia	25	7	63	76	84	3	16	26	89	95	52
Monte Negro	44	69	106	69	98	3	34	86	53	136	45
Serbia	93	45	182	85	44	42	80	161	98	116	103
Kosovo	86	100	136	121	58	28	98	43	121	138	83

Source: Doing Business Report 2014, World Bank, Washington

The overall ranking of the Republic of Macedonia indicates that the country went through serious reforms in the last decade. The main reform in the Republic of Macedonia aiming towards improvement of the business climate includes two phases - Regulatory Guillotine introduced in 2006, and Regulatory Impact Assessment (RIA) introduced in 2006,

³ Doing Business Report 2014, World Bank, Washington, p.1.

⁴ Ibid.

although obligatory as of January 2009. In addition, the Government has introduced a Unified Electronic Register for Legislation (ENER), which could also be considered as an important regulatory reform.

The Regulatory Guillotine was undertaken in four phases, which have overlapped in terms of time, as only the first phase have been completed so far. The first phase covered over 545 legal acts which were amended in order to reduce the administrative burdens and procedures for personal and business purposes. The second phase of the Regulatory Guillotine focused on customs tariffs and procedures. It resulted in a package of 54 recommendations for cutting down on customs tariffs and long administrative customs procedures. The third phase is aimed at eliminating administrative burden through consultation of the business community. Out of the extensive number of proposals by the business community, 46 measures were selected and approved for implementation by the Government in September 2010. The fourth phase of the Regulatory Guillotine began in 2012, applying the same methodology as the previous phase, i.e. consultation of the business community, primarily small companies. Out of 109 proposals from the small companies, 40 were selected and approved for implementation by the Government. The expected benefits for the small companies could be summarized in simplified procedures for obtaining the necessary documents from state and public institutions, more transparent rules for participation in the public tenders, as well as shorter deadlines for receiving construction permits for building industrial capacities, etc.

The reforms undertaken within the process of regulatory guillotine have resulted in considerable improvement in Macedonia's ranking in the World Bank's Doing Business Reports, as shown above. In addition, as mentioned above, the regulatory impact assessment (RIA) was introduced as obligatory for the Governmental institutions in January 2009. RIA has been implemented in two forms: Preliminary RIA, which focuses on determining the problem to be regulated by the policy, and Expanded RIA which enables stakeholder involvement through public consultation from the early stage of drafting or amending the legislation. This should contribute to increase in the quality of the policies and legislation in terms of responding to the needs of the companies, but the implementation of RIA in the Republic of Macedonia could not be assessed as particularly successful at present.

Furthermore, the reforms towards better regulatory and business environment have included establishment of Single National Electronic

Register for Legislation (ENER). ENER has been designed as a single spot where draft laws should be uploaded and made available for comments by the stakeholders (during the process of RIA) at least 10 days prior to their processing to the Government or Parliament, in an open and transparent manner. This register therefore, serves as a tool for informing citizens, the business community, Commercial Chambers, NGOs, business associations, legal entities and other interested parties about existing legislation acts, proposed laws in the phase of their preparation, and Regulatory Impact Assessment (RIA) on these proposed laws.

Table 2: Change of the ranking of the Republic of Macedonia in the Doing Business Reports 2007 and 2014, by sub-indexes

Sub-indexes	Ranking in Doing Business Report 2014	Ranking in Doing Business Report 2007	Changes in the ranking 2014-2007
Starting business	7	76	↑ 69
Dealing with construction permits	63	152*	↑ 89
Getting electricity	76	121**	↑ 45
Registering property	84	87	↑ 3
Getting credit	3	48	↑ 45
Protecting investors	16	83	↑ 67
Paying taxes	26	79	↑ 53
Trading across the borders	89	127	↑ 38
Enforcing contracts	95	72	↓ 23
Resolving insolvency	52	55**	↑ 3
Overall rank	25	92	↑ 67

Note: Doing Business Report 2014 encompasses 189 countries, while Doing Business Report 2007 encompasses 175 countries

* This sub-index has been first measured in 2009. Therefore, the change in the ranking refers to 2014/2009

** This sub-index has been first measured in 2012. Therefore, the change in the ranking refers to 2014/2012

Source: Doing Business Reports 2007-2014, World Bank

It could be argued that the undertaken reforms, as measured by the World Bank Doing Business Reports, have caused positive changes in most of the areas monitored by World Bank. As presented in Table 2, the overall ranking of the Republic of Macedonia rose by 67 positions in the period 2007-2014, from 92nd to 25th position. Positive changes have been registered in all other sub-indexes, apart from the category of enforcing contracts. It should be noted that significant progress has been also made into the areas which were still marked as problematic, such as dealing with construction permits and trading across the borders. These categories are particularly important for the domestic as well as for the foreign companies operating in the country, implying the necessity for further reforms, tailored according to the needs of the business sector. The third and fourth phase of regulatory guillotine (still on-going) have been designed in that manner, which raises the expectations for delivery of genuine reforms for the companies.

The data presented in Table 1 and Table 2, along with the brief elaboration of the undertaken regulatory reforms, provide a relatively bright image about the business climate in the Republic of Macedonia. As mentioned above, there are several problematic areas where additional efforts of the institutions are needed, but the overall picture is rather positive. However, the perspective provided in the Doing Business Report mainly reflects the institutional view and undertaken reforms in the regulatory sphere, and therefore, it would be interesting to have a look on the views of the companies. The World Bank has undertaken Enterprise Survey of 360 Macedonian companies in 2013, requesting firms' opinion about issues related to operational work (obtaining licenses, etc.), trade, finances, informal economy, workforce, etc. A segment of the issues covered with the Survey and linked to some of the sub-indexes in the Doing Business Report have been presented in the Table 3.

Table 3: Enterprise Survey in the Republic of Macedonia 2013

	Macedonia	Eastern Europe and Central Asia	All countries
Starting business and construction permits			
Days to obtain an operating license	14.4	23.1	29.4
Days to obtain construction-related permit	180.0	72.6	71.0
Days to obtain an import license	13.8	13.5	18.5
Senior management time spent dealing with the requirements of government regulation (in %)	10.3	12.1	9.9
Trading across the borders			
Percent of firms exporting directly or indirectly (at least 1% of sales)	30.6	19.4	17.5
Days to clear direct exports from customs	3.7	4.8	7.8
Percent of firms using material inputs and/or supplies of foreign origin	76.0	61.4	63.0
Days to clear imports from customs	6.7	5.9	11.7
Getting electricity			
Days to obtain an electrical connection (upon application)	28.9	26.6	30.7
Percent of firms identifying electricity as a major Constraint	28.9	17.9	34.1
Paying taxes			
Percent of firms competing against unregistered or informal firms	55.5	39.0	54.6
Percent of firms identifying practices of competitors in the informal sector as a major constraint	34.6	20.5	28.0
Getting credit			
Percent of firms with a bank loan/line of credit	45.4	36.5	34.6
Proportion of loans requiring collateral (%)	90.7	82.8	77.7
Value of collateral needed for a loan (% of the loan amount)	275.5	205.6	193.2
Proportion of investment financed by banks (%)	11.1	13.7	14.5
Percent of firms identifying access to finance as a major constraint	19.3	17.1	28.9

Source: Enterprise Surveys, World Bank (<http://www.enterprisesurveys.org>)

As evident from Table 3, the most serious problem observed by the companies is obtaining construction license, which in average takes 180 days or 2.5 times longer than the average period in other countries. In addition, the majority of interviewed firms felt threatened by the informal competition, while access to finance has been more challenging compared to other countries (in terms of collateral value). The other presented categories do not differ a lot from other countries. Furthermore, the provided responses by the companies are largely in line with the scores from Doing Business Reports, confirming the impact of the reforms in the real sector. In this respect, it could be argued that the business climate in the Republic of Macedonia has improved as perceived by international institutions, as well as domestic companies. However, considering that ultimate aim of improvement of business climate is smooth functioning of the real sector and increase of investment, the regulatory reforms should be also linked to the results in the investment sphere. A brief overview of the investment in the Republic of Macedonia over the analyzed period is provided below.

2. Investment in the Republic of Macedonia

The investment in the Republic of Macedonia could be analyzed through gross fixed capital formation (which excludes financial investment) and foreign direct investment (FDI). For the purpose of more realistic assessment of investment in the country, a comparison with other Western Balkan countries has been provided. As presented in Table 4, the gross fixed capital formation in the Western Balkans as percentage of the GDP varies across the countries, ranging from 17% in Albania up to 30% in the Republic of Macedonia in 2012 (the latest year with available data for all the countries). Most of the countries in the region have higher share of gross fixed capital formation compared to the 18% in EU (2011), which is not unusual as developing countries' governments tend to spend more in public investment (roads, public buildings, etc.), for the purpose of spurring economic growth.⁵ The Republic of Macedonia increased its gross fixed capital formation from 20% up to 29% of GDP over the period 2009-2013, while Montenegro experienced

⁵ Silvana Mojsovska, Measurement of the Investment climate versus Investment in the Western Balkans in conference proceedings "Rule of Law Enhancement in the Western Balkans: Identifying the Next Steps", Aspen Institute, Berlin, 2014, p.52.

a reverse trend of decreasing from 27% down to 18% of GDP during the same period. In Croatia, this indicator also dropped from 24% to 18% over the analyzed period. Large share of the increase in the gross fixed capital formation in the Republic of Macedonia has been attributable to the government's spending, while the decrease in other countries could be related to the prudent fiscal policy, as well as the decrease in FDI.

Table 4: Gross fixed capital formation in the Western Balkans, 2009-2012 (as % of GDP)

	2009	2010	2011	2012	2013
Albania	18	18	17	17	17
B&H	18	17	21	22	n.a
Croatia	24	21	20	19	18
Macedonia	20	19	21	30	29
Montenegro	27	21	18	19	18
Serbia	19	18	18	21	n.a
Kosovo	25	28	29	27	n.a

Source: World Bank Data base

(<http://data.worldbank.org/indicator/NE.GDI.FTOT.ZS>)

Although finances are excluded from the gross fixed capital formation, recent study by Estrin and Uvalic⁶ suggests that FDI has contributed substantially to gross fixed capital formation in the Western Balkan countries from 2003 onwards. During the period 2003-2011, the ratio of FDI to gross fixed capital formation was, on average, 32 percent for the whole region (Kosovo excluded as no data were available, while Bulgaria and Romania included), but it was particularly high in Montenegro (over 70 percent) and Serbia (over 30 percent).⁷ This indicates that FDI contributed to increase of capital assets in the countries by transfer of technology and equipment. For the countries that received larger amounts of FDI, this finding could be very relevant. Unfortunately, the Republic of Macedonia did not manage to attract considerable investment compared to other western Balkan countries. Table 5 presents

⁶ Estrin and Uvalic, Foreign Direct Investment in the Transition Economies: Are the Balkans different?, LSE, LEQS PaperNo.64/2013, July 2013.

⁷ Ibid.

the FDI inflows in the Western Balkans in the period 2008-2013. The crisis of 2008 onwards was mostly stated as a reason for overall fall of the investment on the global level, which certainly affects the region, too.

Table 5: FDI Inflows in the Western Balkans, 2008-2013
(millions of US\$)

	2008	2009	2010	2011	2012	2013
Albania	974	996	1051	876	855	1225
B&H	1002	250	406	493	366	332
Croatia	5938	3346	490	1517	1356	580
Macedonia	586	201	212	468	93	334
Montenegro	960	1527	760	558	620	447
Serbia	2955	1959	1329	2709	365	1034
Kosovo	n.a	n.a	n.a	n.a	n.a	n.a

Source: World Investment Report 2014, UNCTAD, p.208.

Based on the presented data, there is visible discrepancy in the case of the Republic of Macedonia promoted as a front runner in the regulatory reforms in the region over the past decade. Apart from the extensive reforms which brought the country high rankings for doing business, Macedonia has been also pursuing intense campaign for attraction of the FDI, including immense FDI incentives, media advertisement, road shows, etc. However, the results were not as expected, indicating that the foreign investors base their decisions on numerous factors, with good regulation and favorable business climate being only part of them. On the other hand, Montenegro, which has relatively good overall ranking and needs to undertake substantial reforms with regards to construction permits and enforcement of the contracts (same as the Republic of Macedonia), has attracted decent amount of FDI in the past years. Majority of them were related to tourism properties, including the element of construction permits, too. Serbia also attracted substantial amount of investment, despite its relatively low rankings in some areas suggesting that the focus of the policy-makers should be primarily on the drivers for FDI, as it could be said that investment climate measurements do not have determining impact in the final stages of FDI decision-making.⁸

⁸ Silvana Mojsavska, op. cit., p.53.

Implicitly, the main factors that determine the investment decisions of the companies could be only partially controlled by the state, i.e. improvement in the business climate plays important role for the investment, but could be considered only as one of the factors. According to the World Bank, the investors base their decision for investment taking into account three groups of factors: factors related to costs for production and distribution, factors related to risks and barriers to competition (Table 6).

Table 6: Factors that share opportunities and incentives for firms to invest

Factors	Government has strong influence	Government has less influence
Costs	<ul style="list-style-type: none">- Corruption- Taxes- Regulatory Burdens, red tape- Infrastructure and finance costs- Labour market regulation	<ul style="list-style-type: none">- Market-determined prices of inputs- Distance to input and output markets- Economies of scale and scope associated with particular technologies
Risk	<ul style="list-style-type: none">- Policy predictability and credibility- Macroeconomic stability- Rights to property- Contract enforcement- Expropriation	<ul style="list-style-type: none">- Consumer and competitor responses- External shocks- Natural disasters- Supplier reliability
Barriers to competition	<ul style="list-style-type: none">- Regulatory barriers to entry and exit- Competition law and policy- Functioning finance markets- Infrastructure	<ul style="list-style-type: none">- Market size and distance to input and output markets- Economies of scale and scope in particular activities

Source: World Development Report 2005: Better Investment Climate for Everyone, World Bank, Washington, 2004, p.22.

As presented in the Table 6, strong legal and institutional framework is needed, but there are also many factors on which state does not have strong influence. Particularly problematic factor for the Republic of Macedonia is the small size of its market. In this respect, no

regulation could help to prevail this factor (apart of the case when country has natural resources, such Montenegro), implying the need for strategic alliances and regional integration, so the country would be part of a broader market. The idea about development of the regional investment concept has been already put on the agenda of CEFTA.⁹ This could be a good step forward toward increase of the awareness of the Western Balkans countries about the economic/industrial specifics of the their neighbors, which is crucial for making less isolated investment policies in the region.¹⁰ There are other limitation factors too, implying the Republic of Macedonia should take into consideration all constraints related to investment. In this respect, the regulatory reform should remain one of the corner-stones in creation of favorable investment climate, but combined with other policy approaches in purpose of achieving better investment results, too.

Conclusion

Starting from 2006, the Republic of Macedonia has undertaken intense regulatory reforms which resulted in significant increase of the country's ranking in Doing Business Report by the World Bank. In the overall ranking, the Republic of Macedonia achieved impressive shift from 92nd position in 2007 to 25th position in 2014. The major reforms that led to this result were the Regulatory Guillotine, which has been continuously implemented since 2006, along with introduction of Regulatory Impact Assessment (RIA) and Unified Electronic Register for Legislation. In terms of sub-indexes as measured in Doing Business Report, improvements were noted in all areas over the period, with exception of enforcement of contracts. However, apart of this category, dealing with construction licenses, as well as trading across the borders and registering property are also areas where additional intense reforms are needed. The overall improvement in the business climate has also been confirmed by the companies, in the Enterprise Survey undertaken by the World Bank as their views corresponds mostly to the indicators presented in the Doing Business reports, including the areas where further improvement is needed.

⁹<http://192.232.255.119/~cefta/sites/default/files/Priorities%20Macedonia%20Chairman%20ship%202014.pdf>

¹⁰ Silvana Mojsovska, op. cit., p.53-53.

However, considering that ultimate aim of improvement of business climate is smooth functioning of the real sector and increase of investment, an effort for linking the regulatory reforms to the results in the investment sphere was made in the paper. Opposite to the regulatory scoring that placed the Republic of Macedonia in a superior position compared to the other countries in the Western Balkan region, the investment data indicated that the Republic of Macedonia was less successful than other countries in attracting investment. This suggested that the regulatory reforms and the commitment of the Government to create a favorable investment climate should take into consideration all factors relevant for investors, in particular those that serve as a major constraint for the country. In the case of the Republic of Macedonia, such factor is the small size of its market which implies the need for strategic alliances and regional integration. There are other limitation factors, too, implying that Republic of Macedonia should tailor its investment policy towards overcoming of constraints, with regulatory reform being part of the policy-creation process.

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INVESTMENT FUNDS AND THEIR INVESTMENT STRATEGY IN THE REPUBLIC OF MACEDONIA

Abstract

Investment funds are institutions with primary interest to invest free resources of individuals and companies in order to achieve higher returns with lower risk level. To realize this goals, investment funds have to select an appropriate investment strategy and portfolio of assets.

The paper analyzes the performance of investment funds in the country in order to investigate the development of investment funds in the past. The analysis is done in terms of change in the total value of the property and portfolio of the investment fund from several aspects: assets structure, geographical allocation and sectorial structure of an investment.

The research provides an opportunity to review the functioning of this type of institutions in the capital market which is not developed enough, in this case with the example of the Republic of Macedonia. At the same time this gives us an opportunity to make a comparative analysis with the performance of investment funds in other countries (developed and underdeveloped countries) in the future. It also gives us an opportunity to bring a conclusion whether the global financial crisis had an impact on the performance of investment funds, i.e. what changes occurred in the investment policy and strategy in these institutions in response to the financial crisis.

The research is based on secondary data obtained from publications of relevant domestic institutions (National bank of

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Macedonia and Commission for Securities of the Republic of Macedonia).

Key words: investment funds, investment strategy, portfolio of investments, Republic of Macedonia.

JEL classification: G11

Introduction

The main reason for investing hundreds of billions of dollars in the investment funds every year lies in the fact that through investment funds higher profits can be achieved than the profits achieved with standard investment in banks or savings banks. The money invested in funds do not constitute term obligated funds and they are always available to investors. Investing in investment funds provides greater ability to separate (diversify) the risk of the investments. Funds are managed by a team of professional experts who manage and lead the portfolio fund, adhering to basic rules of profitability, safety and liquidity and enabling achievement of lower costs in trading with securities compared to the individual venture. Investment funds may invest in domestic and foreign capital markets, further enabling greater diversification of risk. The funds allow individual investors to reduce the risk by diversifying the portfolio, liquidity, responsible cash management and lower transaction costs.³

Investment funds as a kind of financial institution differ from other types of financial institutions such as banks, savings and others, which are obtained as financial assets through deposits from the corporate sector and the household sector and are basically invested in the form of loans as a main source of funding. The investment funds, on the other hand, collect their funds through issuance of stocks and shares, investing them in a number of different assets (stocks, shares, bonds, deposits, etc.). The diversification of the assets means diversification of the risk, but it also creates an opportunity for increased return on investment.

The advantages of investing in investment funds are numerous, however, the important ones being:⁴

³ Brown, F.K, Reilly K.C., Investment analysis and portfolio management, 7-th edition, Thomson South Western, 2002, p.1074.

⁴ Bodi Z., Kejn A., Markus A., Investicii, 8-th edition, Tabernakul, Skopje, 8–th edition (translated in macedonian language), 2010, p.12.

- Pooling - Investment Fund collects funds from number of individual investors in the market and then acts as a major investor creating favorable conditions and allowing investment of individuals;
- Diversification - an investor is limited to the lower part of the stock or bond (unless they have a great amount of money). The investment fund owns many different securities. If some of the securities experience decrease in the price, the remaining of the securities would reduce the decline in the value of the investment fund or would completely annul it. Diversification reduces the risk of investment;
- Professional Management - the majority of investors have free funds, but lack the knowledge or time to monitor the development of the market. An investment fund has a team of professionals (portfolio managers) who constantly analyze and monitor the trading of securities on the capital market;
- Liquidity - investors can withdraw the money invested in the investment fund for a very short period of time.

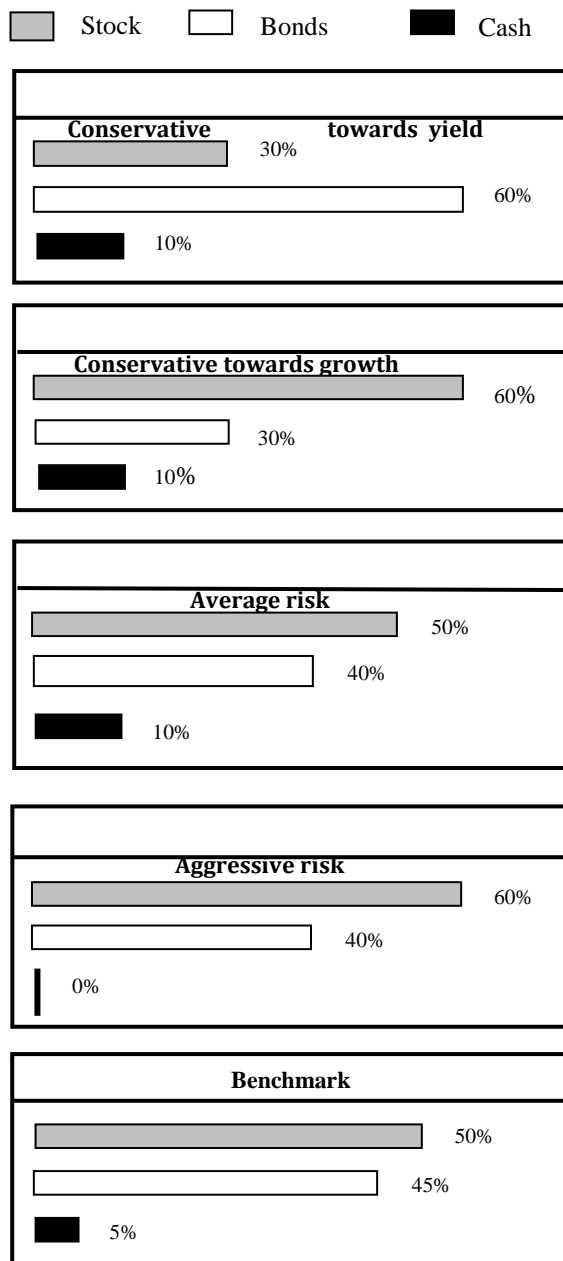
1. Investment strategy as a key stage of the investment process

Since there was a correlation between yield and risk of investment, for the purpose of investing in a particular security or portfolio, it is very important to define these terms in order to achieve the projected yield. In assessing the return on investment specifically, if the risk preferences of the investor are not taken into account, the real investment decision might not be brought. It stems from the fact that different types of securities exercise different contributions and different risk.

In terms of risk, we can differ between several types of allocation of capital among different groups of assets - stocks, bonds and cash (see Figure 1):

- Conservative towards yield;
- Conservative towards growth;
- Average risk;
- Aggressive risk;
- Basic type of venture (benchmark).

Figure 1: Categories of risk and capital allocation



Source: Reilly K. Frank, Brown C. Keith: "Investment analysis and portfolio managment", seventh edition, Thomson South Western, 2002, p.43.

As the example shows, the preferences of the management of the corporation will depend on whether there is a commitment to: 1) invest in order to provide a constant yield by investing most of the assets in bonds, or 2) preference growth through investing in stocks at most, or 3) attitude towards the average level of return and risk, and therefore more balanced correlation between investment in stocks and bonds, or 4) aggressive way of investment with investing a greater percentage in stocks and bonds without any cash. Hence, the conclusion of the initial needs of analysis of the tolerance (preference) of investor of risk. Moreover, if it comes to individual investors, the preferences of the owner or the management of the corporation would be taken into account. Unlike this case, with the institutional investors – pension funds, investment fund, etc., they are obliged to take into consideration the preferences of their customers, which can be physical persons or legal entities, from financial or non-financial nature. In developed countries, because of the high degree of development of the capital markets, funds have developed their own categorization of customers according to their risk level. In magazines and books in the field of investment various kinds of tests are published which help potential investors to assess their level of tolerance to risk preference.

2. Role of the investment funds in the financial sector in the Republic of Macedonia

In Macedonia, the first investment fund based on resident portfolio investors was founded in 2007. The lack of investment funds in Macedonia for long periods, despite the existence of adequate legislation since 2000, was due to several factors. But undisputedly the key factors are the following:

- Insufficient development of the Macedonian capital market;
- Certain limitations in the law on investment funds, which primarily relate to the amount needed for establishing an investment fund and lack of ability to open a closed-end investment funds.

Changes in the Law of Investment Funds⁵ reduced the required capital to establish an investment fund. At first 2,000,000 German marks

⁵ Law on Investment Funds, Official gazette of Republic of Macedonia no. 12/2009, 67, 2010, 24/2011, 188/2013.

were required, but the new changes in the legal regulation provided capital requirement of 500.000 EUR, and ability to open investment private funds which require basic capital of 50.000 EUR. The increase in the turnover at the Macedonian Stock Exchange was an additional factor in the revival of the investments funds in 2007.

Table 1: Structure of the financial system in the country for the period 2006-2012 (in %)

	2006	2007	2008	2009	2010	2011	2012
Banks	88,91	90,5	89,25	88,6	89	88,5	88,5
Saving houses	1,19	1,17	1,23	1,1	0,9	0,8	0,7
Insurance companies	7,46	4,48	4,24	4	3,7	3,5	3,3
Leasing companies	1,4	2,02	3,07	3	2,5	2,5	1,7
Pension funds	0,63	1,26	1,79	2,9	3,6	4,3	5,3
Pension fund management companies	0,1	0,08	0,09	0,1	0,1	0,1	0,1
Brokerage house	0,31	0,44	0,29	0,2	0,1	0,1	0,1
Investment funds	0	0,03	0,03	0,1	0	0,1	0,1
Investment fund management companies	0	0,01	0,01	0	0	0	0,003

Source: Adapted from data from reports on financial stability in the country for the period 2006-2012, the National Bank of Macedonia.

The short period of existence of the investment funds conditioned small participation, and consequently negligible influence on the financial sector in Macedonia (see Table 1). Based on the data from Table 2, the participation of investment funds from all financial institutions in the country (banks, savings banks, insurance companies, leasing companies, etc.) is the lowest - 0.01%. In 2007 and 2008 there was a revival of investment funds, primarily as a result of the revival of

the Macedonian Stock Exchange in 2007, where significant purchasing transactions on the stock market could be witnessed, in which a significant portion was made by individuals with hope to achieve gains from investments in securities, primarily referring to the shares of Macedonian companies. But under the influence of the global financial crisis, which was negatively reflected on the Macedonian Stock Exchange, a sharp drop in share price (stock price dropped below its book value) happened, which greatly reduced the interest in purchasing shares, which in turn influenced the decrease in the activities of the investment funds, and situations resurrected when investment funds again had no impact on the financial system.

3. Investment strategy of the investment funds in Republic of Macedonia

In order to see the characteristics of the investment strategy of the investment funds we have analyzed only a 3-year period (2010-2012), because of their short period of existence and functioning in Macedonia. The analysis of the characteristics of the investment strategy is focused on the assets' structure of the portfolio, geographic exposure to investments and sectors structure of the investment of the investment funds.

As evident from the data in Table 2 and Figure 1, in the period 2010-2012 the total value of the assets of the investment funds, and the total net value of investment funds were constantly increasing, so that in 2012 the total value of the assets of open-end investment funds was increased by 95 %, while the total net value in 2012 compared to 2010 had increased by 98 %. Despite these increases in the value of assets of the investment funds in a period of three years, it is an undisputable fact that there is underdevelopment of this type of fund industry in the country.

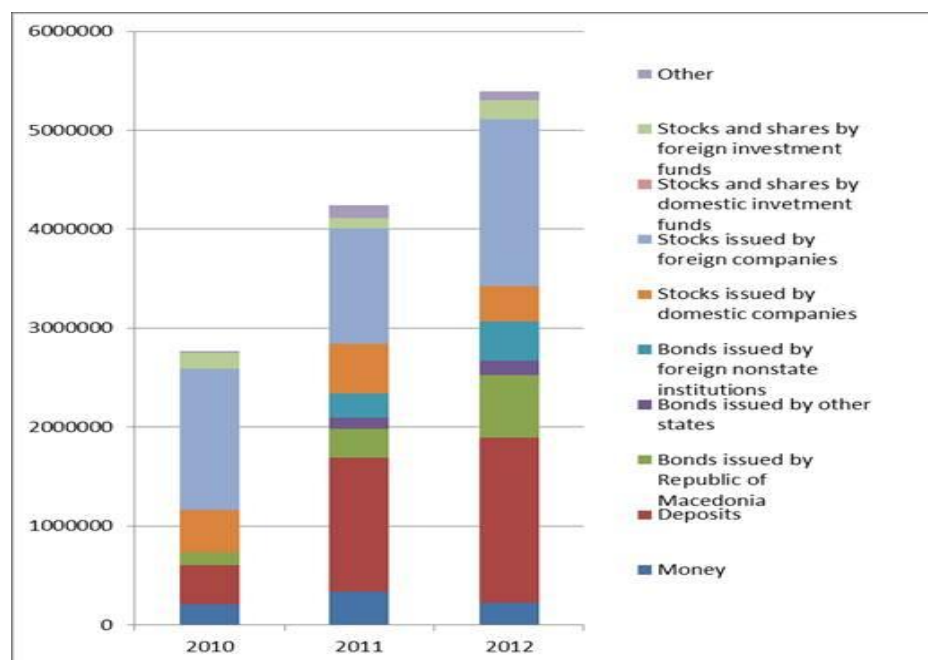
Consideration of the assets' structure of the investment funds depicts a change in the structure for a three-year period. In the structure of the open-end investment funds in 2010 investments in equities of 67.5% (while the share of stocks issued by foreign joint stock companies is 51.71 %) dominated.

**Table 2: Assets' structure of open-end investment funds
(in EUR)**

	2010	%	2011	%	2012	%
Money	208561	7,5	335807	7,9	224781	4,2
Deposits in domestic banks	397593	14,4	1351251	31,9	1667232	30,9
Bonds issued by Republic of Macedonia	122903	4,4	297720	7,1	635131	11,9
Bonds issued by other states	/	/	106576	2,5	142364	2,6
Bonds issued by foreign nonstate institutions	/	/	244602	5,8	394054	7,3
Stocks issued by domestic companies	433887	15,7	505277	11,9	359986	6,7
Stocks issued by foreign companies	1429679	51,7	1163271	27,4	1686860	31,3
Stocks and shares by domestic investment funds	/	/	/	/	/	/
Stocks and shares by foreign investment funds	159931	5,8	110541	2,6	196692	3,6
Other	12289	0,4	126516	3,0	88634	1,6
Total value of assets of investment funds	2764844	100	4241562	100	5395733	100
Total liabilities	70214		56274		39375	
Total net value of assets of investment funds	2694630		4185288		5356358	

Source: Adapted from data from reports of the Commission for Securities of the Republic of Macedonia for 2010, 2011, 2012.

Figure 1: Displaying the asset structure of open-end investment funds



In 2011 and 2012, reducing the share of this type of investment in a portfolio at the expense of increased placements of funds in terms of deposits in domestic banks (31.86% and 30.90%, respectively speaking) and buying bonds where the larger share of bonds is issued by the Republic of Macedonia). The reasons for such changes in the structure of the portfolio was incurred due to the influence of the financial crisis in the country, which led to a change in portfolio strategy of the investment funds, introducing a more conservative way of investing funds in order to reduce the risk of the portfolio of investment funds. Compared to investment funds in the Euro area in which a change in the investment policy and strategy occurs in 2008 under the impact of the global financial crisis, in Macedonia such changes occur even in 2011.⁶ The reason for this is primarily overdue reaction of the Macedonian capital market on the impact of the global financial crisis.

⁶ Boskovska Diana, Contemporary trends and prospects of economic recovery, CEMAFI International, Nice, France, p.480.

At the same time, conservative investment policy of the investment funds in 2011 caused changes in the geographical allocation of investments of funds, with increased investments in the domestic economy compared to investments abroad (42% in 2010 to 58.8% in 2011). In terms of investments abroad, the investment funds are present on the markets of Europe, America, and the BRIC countries.⁷

In terms of sectoral structure, in 2010 investments in the oil and pharmaceutical industry dominated, but with the changes in the investment strategy of investment funds in 2011, investment in banking and finance hold the highest share, which is a result of high interest rates on deposits of the domestic banks.⁸

Conclusion

The research analysis of investment funds in the Republic of Macedonia, taking into consideration the short period of existence of this type of institutions, only applies to 3 years (2010-2012). The total value, and the value of net assets of investment funds for the three-year period was increasing steadily, so that in 2012 compared to 2010 total value of open-end investment funds increased by 95% , while the total net value in 2012 compared to 2010 increased by 98%. Despite this large increase in the value of the investment funds, their participation in the Macedonian financial system is at a negligible level, which presents the need for increasing awareness of the population and the corporate sector for the benefits from investment funds, which would contribute to greater investments in such financial institutions, and thus to further develop and increase their position in the financial sector in the country.

This paper at the same time analyzes the impact of the global financial crisis on the investment strategy of the investment funds in the Republic of Macedonia. By recognizing the changes in value of the investment fund are coming to the conclusion that the global financial crisis didn't have negative effect to the value of the investment funds. Rapid adjustment of investment funds to the new situation is made by changing the strategy and investment policy (by increasing the share of

⁷ Reports from Commission for Securities of the Republic of Macedonia for 2010, 2011, 2012.

⁸ Reports from Commission for Securities of the Republic of Macedonia for 2010, 2011, 2012.

bonds in the portfolio) that caused the value of the funds to increase with lower risk in the same time.

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Original scientific paper

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**BANK SPECIFIC DETERMINANTS OF NON-PERFORMING
LOANS IN THE REPUBLIC OF MACEDONIA**

Abstract

The paper observes the non-performing loans (NPLs) in selected developed and developing countries, with a certain focus on the trend and determinants for NPLs in the banking sector of the Republic of Macedonia. High and rising levels of NPLs in the banking sector in the USA, as well as many countries in the Central and Eastern and South-Eastern Europe (CESEE), continue to put strong pressure on banking performances. The empirical research for NPLs in the banking sector in the Republic of Macedonia has acknowledged explicit bank variables influencing NPLs in the banking sector, such as foreign currency spreads between reference lending and deposit rates, personnel expenses/non-interest expenses, equity and reserves/assets and liquid assets/total assets. Moreover, analysis of the internal variables confirmed the previous finding that liquid assets/total assets and personnel expenses/non-interest expenses represent key factors influencing the level the NPLs in the banking sector in the Republic of Macedonia.

Key words: NPLs, Assets Quality, Banking.

JEL classification: G21

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Introduction

The question of NPL was not the major question in the banking sphere until the crises in 2007-2008. The credit quality of loan portfolios across most countries in the world had remained relatively stable until the financial crises hit the global economy. Moreover, it represented the additional products of the financial crisis, which could severely deepen the crisis.

In theory, NPLs feature assets which do not generate income for the bank. NPLs signify financial assets from which banks no longer receive interest and/or installment payments. NPLs are perceived as products which complicate the bank activities and bank soundness.

NPLs signify a key issue for the investors' expectations, providing negative market signals for further investment and lowering prices on the market. The rate of NPLs represents a proxy for the probability of default of the banking sector's overall credit exposure; hence the factors driving the NPL ratio deserve a lot of interest. Therefore, the trend of NPLs in the banking industry embodies the significant demonstration of the quality of the banking portfolio and soundness of the banking sector. The effects of the NPL are multiplied in order to summarize the broad picture. The influence of the NPLs on the separate banking activities can be divided into separate actions such as:

- decreasing of the total bank profit;
- increasing of the loan loss provisions;
- erosion of the bank capital;
- increasing of the risk premiums on the bank products;
- increasing of the interest rates and prices of loans;
- lowering of the rate of the economic growth.

The above mentioned consequences clearly demonstrate the negative effects of NPLs on the various bank activities. Such effects are enhanced by the fact that in the bank centered economies, in which the financial market perceives the banks as major players, such effects are more centered and effective.

The paper will enrich the existing literature by analyzing the negative trends of the NPLs on the bank activities in the developed countries, developing countries and spotlighting the NPLs in the banking sector of the Republic of Macedonia (RM) by identifying the major determinants influencing NPLs. The study by itself seeks to make clear the role of the latest financial crises in the NPLs movement. Findings

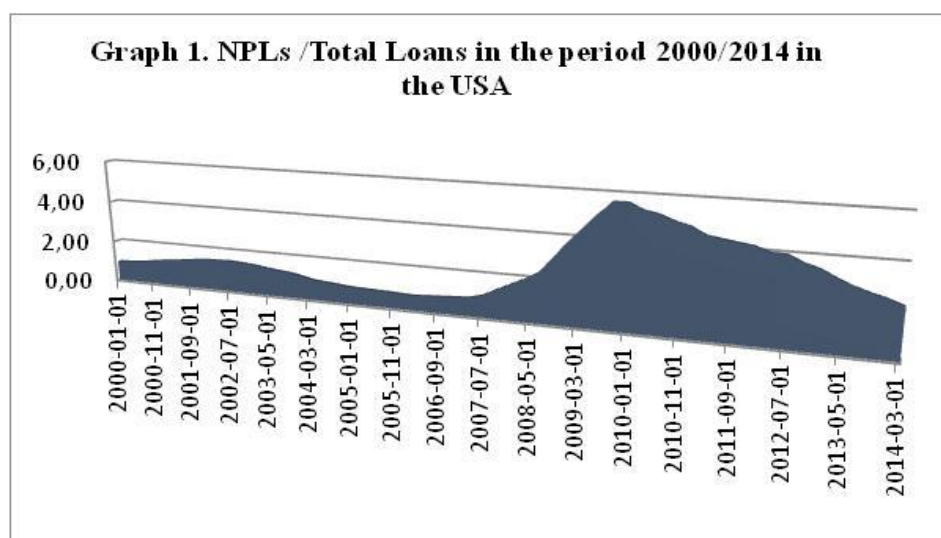
should confirm the hypothesis that financial crises did not have much effect on the NPLs in the banking sector of the Republic of Macedonia due to the traditional and conservative approach of the banks and rapid increase of the loans loss provisions. Moreover, the results of the regression analysis should define the key determinants for the current level of NPL, and to confirm if the trend of NPLs has followed the trend of GDP growth.

The paper is structured in the following approach: section two represents NPLs in the developed countries and developing countries. section three provides insight and analysis of the trend of NPLs in the Republic of Macedonia, whereas section four presents the econometric model by testing the main variables that have influenced the level of NPLs in the last 10 years. The last section provides the main conclusions and policy recommendations.

1. NPLs in the banking sector of the developed and developing countries

The level of NPLs in the developed as well as developing countries depends on various internal factors and macroeconomic measures. The latest financial crisis has left high level of NPLs in various countries. Past financial crises and experience suggest that in recovery period cleaning of the balance sheets of the many financial institutions is required, including the process of bringing down NPLs.

During the financial crisis, the NPLs ratio was of particular interest. Before the crisis, the trend of development of the economy was followed with the decreasing trend of the NPLs ratio. NPLs ratio in developed economies reached the record level of 1.4%, whereas in developing economies their level reached 3-4% (Muntead Radu, 2014:323). Having in mind that the crisis originated from the USA, we can initially demonstrate the trend of NPLs as a share of total loans in the USA in the period 2000-2014 (Graph 1).



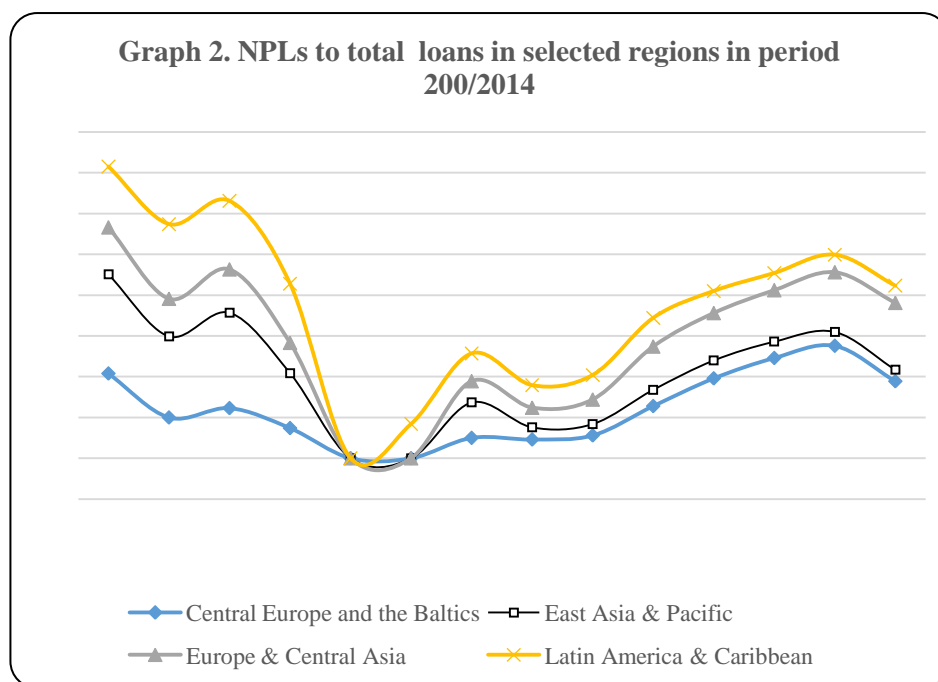
Source: Calculated upon
<https://research.stlouisfed.org/fred2/series/NPTLTL/downloaddata>
(accessed on 31.01.2015)

Analysis of the presented data indicates the sharp rise of the NPLs of total loans at the beginning of the crisis, and reaching the highest ratios in the year 2009. Since 2009, the level of NPLs shows moderate decline due to the undertaken measures for safer and sound banking activities.

In contrast with developed countries, which experienced high NPLs ratios at the start of financial crisis, the developing countries have had immense experience with the high rates of NPLs prior to the crisis. The process of transition in the majority of them was followed by cleaning the balance sheet portfolio from the so called "bad loans". From the analysis of the selected countries it is evident that the trend of NPLs to total gross loans is almost the same, in pace with the differences in the size. Such result signifies that the trend in the world economy has been reflected in the developing countries as well.

Unlike the economy of USA, which shows steady decrease since 2009, in the case of the developing economies, the recovery represented by the decreased trend of NPLs to total loans has shifted since 2012. One of the mechanisms represents the sale of problem loan portfolios. Hence, countries such as Latvia, Romania, Serbia, Moldova, Russia, Estonia, and Poland have undertaken to overhaul their corporate or household insolvency regimes or encouraged out-of-court restructurings (Vienna initiative, 2012). Other countries introduced direct intervention in dealing

with the NPL problem, even though this approach might have incurred large losses. Observation of the general trend of the last decade in the selected region in the world clearly indicates that the trend of ratio of NPLs to total gross loans was quite high in 2000, with a steady decline² in the period before the crisis (Graph 2).



Source: <http://data.worldbank.org/indicator/FB.AST.NPER.ZS>
accessed 15.01.2015

The regional analysis indicates that since the beginning of the crisis, a sharp increase in the share of NPLs to total gross loans has been evident since 2007-2008, which has a direct link to the commencing of the financial crisis. Moreover, the trend of increasing was evident until 2012, when we perceived a decrease in the share of the NPLs to total gross loans.

The study in several countries in Central, Eastern and Southeastern Europe (CESEE), such as Bulgaria, Croatia, the Czech

² Most of the data from World Bank database in the year 2004 for the region are missing; hence the general impression about decline in 2004 should be taken with reserve.

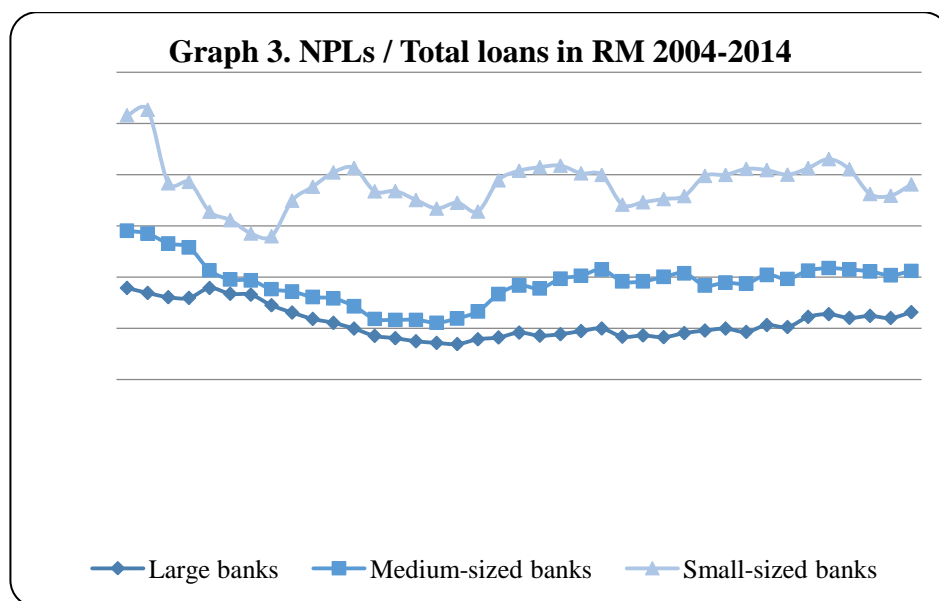
Republic, Hungary, Poland, Romania, Russia, Slovakia and Ukraine indicates that when credit growth is high, relative to GDP growth, high credit growth rates tend to initially lower the NPL ratio, but to increase it later on, with the latter effect still persisting after the period of high credit growth has come to an end (Petr Jakubík, Thomas Reininger. 2013: 48-66). NPL problems increased rapidly in those countries where the economic slump was particularly deep and where the pre-crisis credit boom had been the most extreme. NPL ratios reached some 20% in Latvia, Lithuania, and Montenegro.³ NPLs created asset quality problems in the loans to households and loans to companies, opposite to earlier crises where NPL problems afflicted mostly the corporate sector. Hence, the major efforts should be focused on addressing excessive credit growth and paying special attention on alleviating negative consequences of excessive credit expansion on quality of the banking portfolio.

Practice recognizes several obstacles for handling NPLs in developing countries. Enforcement of collateral tends to take relatively long period and encompasses heavily high costs. Juridical system is not well developed regarding fast solution of the cases related to NPLs. On another hand, out-of-court restructurings as a speedy and cost-efficient tool to achieve debt settlement are not widely utilized in these countries. Furthermore, tax deductibility of loan loss-provisions and write-downs of loans is often limited, and tax systems can highly contribute against NPL resolution (Vienna initiative, 2012). Banking supervision can create serious disincentives for NPL resolution if loan classification and provisioning is not properly enforced. Overcoming these obstacles can widely decrease the level of NPLs, particularly in the countries where provision levels are low.

2. Non-performing loans in the banking sector of the Republic of Macedonia

The banking sector in the Republic of Macedonia has the attributes of traditional banking industry with predominance of the credit activities. Such position provides clear evidence that the NPLs represent a significant key indicator of the quality of the banking portfolio. The trends of NPLs according to the size of the bank are presented in Graph 3.

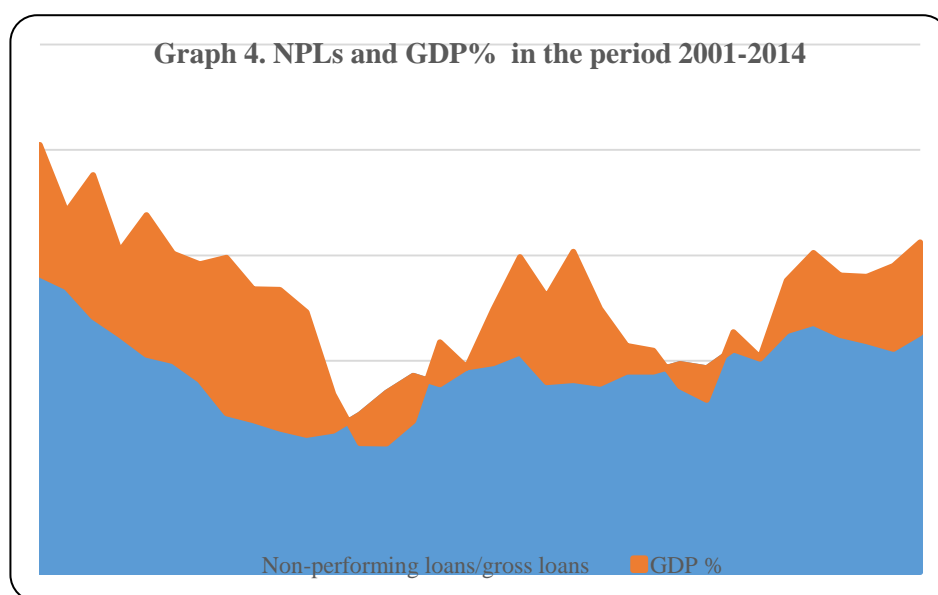
³ <http://data.worldbank.org/indicator/FB.AST.NPER.ZS> accessed 14.11.2014.



Source:

<http://www.nbrm.mk/?ItemID=BF9EB19BE82C6F4288BBE28DE2C18163>
accessed 04.01.2015

NPLs in large, medium-sized and small-sized banks illustrate that higher and most variable ratios of NPLs are indicated in the case of small-sized banks, whereas medium-sized banks have minor increase in the ratio in the post-crisis period. In the case of large banks, Graph 3 specifies rapid decrease up to the beginning of the crises, followed by the minor and stable increase in the years after 2008. Since the majority of papers investigate the relationship between the NPLs and GDP growth, Graph 4 indicates their development in the period of nearly 15 years.



Source:

<http://www.nbrm.mk/?ItemID=BF9EB19BE82C6F4288BBE28DE2C18163>
accessed 04.01.2015

The presented Graph 4 clearly demonstrates that financial crises discontinue the decreasing trend leading to its steady increase starting from 2008. Regarding the rate of GDP growth, it exhibits quite higher volatility than the rate of NPLs. Moreover, there is no quite similar movement in their trend, for instance, in the period before 2008 when NPLs were decreasing; GDP is showing quite volatile movement. In the period after the crises, rapid and volatile decrease of GDP is followed by steady increase of NPLs. Data observation confirms that the complete picture of the trend of these two categories does not present the mirror-image in the opposite direction. Hence, from the analysis we can conclude that rapid drop on GDP growth immediately after the crisis was followed by an increasing trend of NPLs. However, closer look at years 2009/10 indicates that despite the increasing trend of GDP growth, such increase was not followed by adequate decrease of the NPLs, which, on the contrary, continued its growth.

Further analysis specifies that the banking sector in the Republic of Macedonia is characterized with traditional approach to credit activities, with high provisions for securing stability, and generally conservative banking approach. The high percent of the total provisions

to NPLs, from 80-120%⁴, undoubtedly demonstrates the traditional approach and the high level of security which is sought by the banking sector in order to achieve a healthy and sound banking sector.

3. Empirical research: Case of NPLs in the Republic of Macedonia

In search to identify the major elements influencing the NPLs in the banking sector in the Republic of Macedonia, we have observed data on the banking sector in RM in the period Q1/2006 – Q2/2014. The individual impact of the identified independent variables on NPLs of the Macedonian banking sector would be confirmed through the application of regression analysis. The dependent variable is NPLs, whereas independent variables are tested as follows: 1) Foreign currency spreads between reference lending and deposit rate; 2) Local currency spreads between reference lending and deposit rates; 3) Personnel expenses/Non-interest expenses; 4) Equity and reserves/Assets; 5) GDP Total and 6) Liquid Assets/Total Assets.

⁴ <http://www.nbrm.mk/?ItemID=BF9EB19BE82C6F4288BBE28DE2C18163> accessed 04.11.2014

Table 1: Variables influencing NPLs

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Foreign currency spreads between reference lending and deposit rates	-0.705272	0.315664	-2.234252	0.0339
Local currency spreads between reference lending and deposit rates	-0.082576	0.348004	-0.237284	0.8142
Personnel expenses/Non-interest expenses	0.363244	0.094614	3.839213	0.0007
Equity and reserves/Assets	1.921613	0.289471	6.638357	0.0000
GDP Total	1.83E-05	1.43E-05	1.275606	0.2130
Liquid Assets/Total Assets	0.487691	0.036274	13.44460	0.0000
C	-34.64703	4.912582	-7.052712	0.0000
R-squared	0.934536	Mean dependent var	9.998112	
Adjusted R-squared	0.919989	S.D. dependent var	1.852476	
S.E. of regression	0.523996	Akaike info criterion	1.726575	
Sum squared resid	7.413430	Schwarz criterion	2.040825	
Log likelihood	-22.35177	Hannan-Quinn criter.	1.833743	
F-statistic	64.24042	Durbin-Watson stat	1.832488	
Prob (F-statistic)	0.000000			

Through the values of coefficients of determination R^2 presented in Table 1, it can be concluded that the dependent variable is 94% determined by the presented independent variables. Variables identified as significant for the NPLs are foreign currency spreads between reference lending and deposit rates, Personnel expenses/Non-interest expenses, Equity and Reserves/Assets and Liquid Assets/Total Assets. One of the major research questions in our analysis is whether the trend of NPLs is connected with GDP growth; the result of the empirical analysis did not show any significance between NPLs and GDP growth. The result indicates that banks with higher Personnel expenses/Non-interest expenses, Equity and Reserves/Assets and Liquid Assets/Total Assets have higher ratio of NPLs. Contrary, banks with higher foreign currency spreads between reference lending and deposit rates have lower rate of NPLs. Statistical relevance is provided in the Annex 1.

Table 2 is focused on testing internal variables influencing NPLs in the Banking Sector of the Republic of Macedonia in the period 2006-2014.

Table 2: Internal variables influencing NPLS

Dependent Variable: NPLs

Sample: 2006Q1 2014Q2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Liquid Assets/Total Assets	0.246611	0.048410	5.094265	0.0000
Noninterest Expenses/Gross Income	-0.007127	0.039233	-0.181668	0.8572
Personnel expenses/Noninterest expenses	0.383012	0.128008	2.992093	0.0057
Capital Adequacy	1.241632	0.158785	7.819568	0.0000
Net interest Income/Gross Income	0.253587	0.062745	4.041550	0.0004
C	-45.82896	6.946947	-6.596993	0.0000
R-squared	0.895537	Mean dependent var		9.998112
Adjusted R-squared	0.876882	S.D. dependent var		1.852476
S.E. of regression	0.649999	Akaike info criterion		2.135093
Sum squared resid	11.82996	Schwarz criterion		2.404451
Log likelihood	-30.29659	Hannan-Quinn criter.		2.226952
F-statistic	48.00725	Durbin-Watson stat		2.149370
Prob(F-statistic)	0.000000			

Through the values of coefficients of determination R^2 presented in Table 2, it can be concluded that the dependent variable is 89% determined by the presented independent variables. The results confirmed previous variables such as Liquid Assets/Total Assets, Personnel expenses/Noninterest expenses, Capital Adequacy, Net interest Income/Gross Income represent the key factors influencing the level of the NPLs in banking sector in the Republic of Macedonia in the period 2006-2014. Statistical relevance is provided in the Annex 2.

Conclusion

The study confirms the previous findings that developed countries feature increasing trend of NPLs, particularly during the crisis, whereas developing countries have already had valuable experience in high rates of NPLs. The recent financial crisis has clearly demonstrated that regulations and supervision at an individual level is not enough to prevent the negative consequences of the financial crisis. The evidence clearly confirm that the banks with high implementation for the Basel standards, particularly regarding the credit risks, did not experience dominantly low level of NPLs. The paper shows that the level of NPLs has been widely decreasing prior to the crisis. The analysis indicates rapid upward shift of NPLs during the period of crisis in developed and developing countries with major influence in the banking sectors, characterized by the pre-crisis credit boom.

Our primarily results indicate no support for any relation between NPLs and GDP growth. This adds to the growing evidence from the developed countries stressing that NPLs and GDP growth are highly related. Unlike such results, the empirical analysis in the banking sector of the Republic of Macedonia did not identify any significance between NPLs and GDP growth in the Republic of Macedonia in the period 2004-2014. The econometric analysis of the empirical determinants of NPLs in the banking sector of the Republic of Macedonia presented in the paper, suggests that real GDP growth was not the main driver of NPLs during the analyzed period. Examining the trend of NPLs and GDP growth, we could witness a volatile GDP growth, prior and after the crisis, unlike the NPLs trend, indicating steady decrease and increase. Findings confirm the hypothesis that financial crises did not have much effect on the NPLs in the banking sector of the Republic of Macedonia due to the traditional and conservative approach of the banks.

Empirical analysis indicated the variables identified as significant for the NPLs, such as foreign currency spreads between reference lending and deposit rates, personnel expenses/non-interest expenses, equity and reserves/assets and liquid assets/total assets. The second regression pointed out liquid assets/total assets, personnel expenses/noninterest expenses, capital adequacy; net interest income/gross income represents the key factors influencing the level the NPLs in the banking sector in the Republic of Macedonia. Further analysis should focus on macroeconomic

variables influencing NPLs in order to identify the key driver for the increasing trend of NPLs.

The paper proposes several methods for further decreasing of the NPLs and setting their ratio on the level prior to the crisis such as: 1) Tightening supervision accompanied with adequate valuation of collateral and asset classification; 2) Enforcement should be strengthened in order to have adequate procedures for speeding the process of bad credit resolving; 3) Increasing the institutional capacity of the juridical system and speeding the process in solving the NPLs as well as improving out-of-court restructuring frameworks; 4) Encouraging personal finance in order to moderate over debt in case of household financing by the banks. Educated clients in personal finance can lead to lowering the NPLs by encouraging loans only for adequate and justified financial aims. Hence the "Incorrect borrowing" should be replaced by the "Smart borrowing"; 5) Local banking associations should be highly involved in diminishing the trend of NPLs since their impact on the banking portfolio and economy as a whole is immense. The tools and instruments for facing the NPLs are still under hot debate, and the contribution of each financial institution to the overall level of risk is still an issue under discussion.

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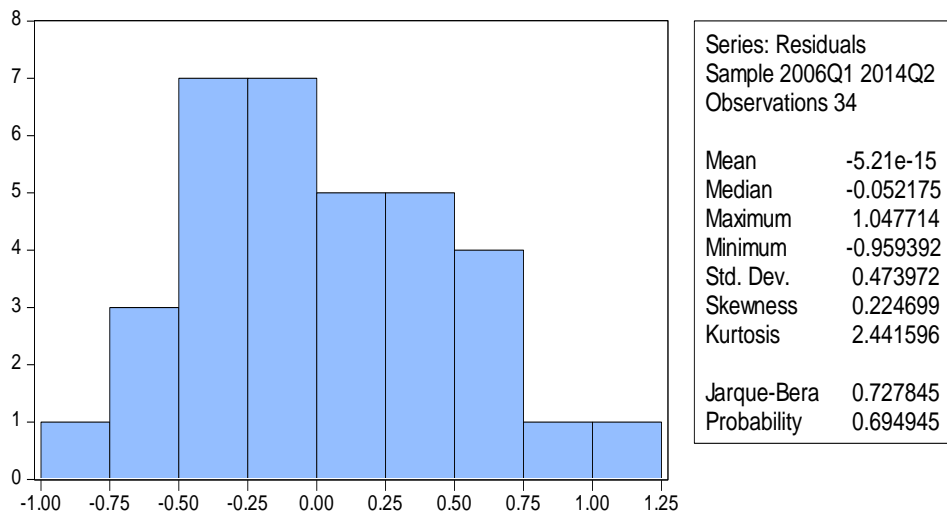
Annex1:

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.041491	Prob. F(2,25)	0.9594
Obs*R-squared	0.112482	Prob. Chi-Square(2)	0.9453

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.368999	Prob. F(6,27)	0.2626
Obs*R-squared	7.930821	Prob. Chi-Square(6)	0.2432
Scaled explained SS	3.604968	Prob. Chi-Square(6)	0.7300



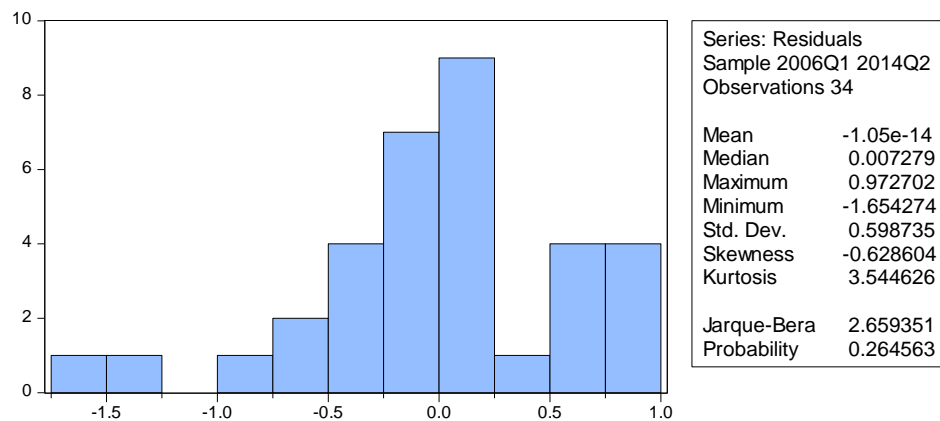
Annex 2:

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.647201	Prob. F(2,26)	0.5317
Obs*R-squared	1.612405	Prob. Chi-Square(2)	0.4466

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.087355	Prob. F(5,28)	0.9936
Obs*R-squared	0.522221	Prob. Chi-Square(5)	0.9913
Scaled explained SS	0.450616	Prob. Chi-Square(5)	0.9938



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Original scientific paper

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POSITION AND PERSPECTIVES OF DEVELOPING COUNTRIES IN THE INTERNATIONAL TRADE SYSTEM

Abstract

This paper aims to provide an overview of the position of the developing countries in the international trade system and discussion about perspectives of their trade development. The main hypothesis of the paper is that developing countries as a group have made a breakthrough in the world trade in the past two decades, but genuine improvement has been made and enjoyed by several large developing countries, primarily China. The paper elaborates mostly by use of methods of analysis and synthesis, based on the extensive processing of trade data, as well as relevant literature. In this context, the paper provides evidence about trade liberalisation of the developing countries since 1980s to the present time, intense export growth of the developing countries over the period, as well as change of the trade structure of the developing countries with developed countries, evident through rising share of the medium and high skills and technology based products. In purpose of provision of more realistic assessment of the position of the developing countries in the international trade system, special attention has been put on China's trade performances, given the rapid increase of China's share in the world trade from less than 1 per cent in 1980 to over 10 per cent in 2011. The major findings of the paper confirm that improvement of the overall position of the developing countries in the international trade system has mainly resulted from the improvement of the trade position of several countries, primarily China. The paper also

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provides overview on WTO simulations about international trade prospects up to 2035, which confirm further dependence on the trade position of the developing countries as a group from China's trade accomplishments. In this perspective, the paper argues that there is a need for differentiated treatment and provision of extra flexibilities for the other developing countries in purpose of achieving as genuine improvement in their trade position.

Key words: developing countries, developed countries, export, import, international trade system.

JEL classification: F13, F18

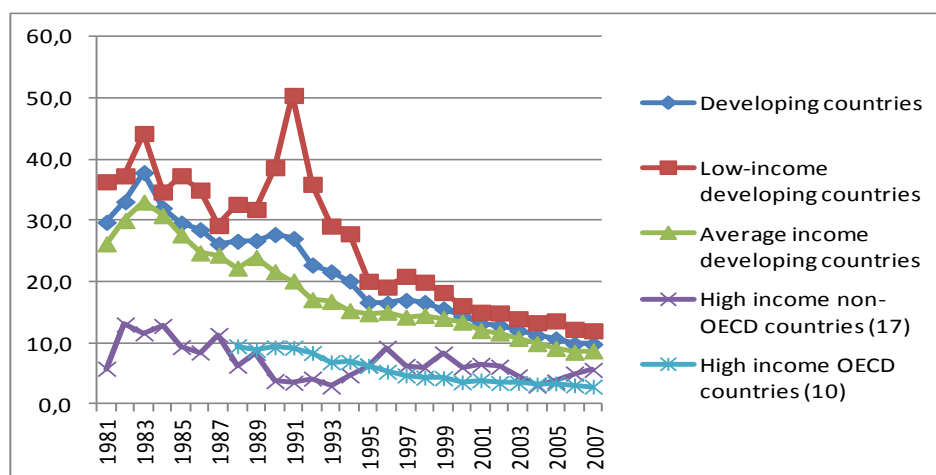
Introduction

The international trade of national economies has been often perceived as an indicator for their current level of development, but also as a potential to boost further growth of the countries. In this perspective, the position of the developing countries in the international trade system is an interesting subject for research, because theoretically, the improvement of their position should have positive effects on their development. However, given the diversity and largeness of the group of developing countries, the overall improvement of their position does not necessarily mean genuine progress for the whole group. The main hypothesis of this paper is that developing countries as a group have made breakthrough in the world trade in the past two decades, but genuine improvement have been caused and enjoyed only by several large developing countries, primarily China. In this context, the paper would focus on trade liberalisation and export growth of developing countries since 1980s, export destinations, as well as trade structure of the developing countries against developed countries. In line with the main hypothesis, special attention would be put on China's trade performances. Also, the paper would provide an overview on WTO simulations on international trade prospects up to 2035, as well as discussion on possibilities of genuine improvement of the trade position of developing countries. The methodology in the paper primarily includes analysis and synthesis, based on extensive processing of trade data, as well as analysis of the relevant literature.

1. Position of developing countries in the international trade system

Under the auspices of GATT/World Trade Organisation, the international trade system went through intense trade liberalisation in the past three decades, resulting into significant decrease of trade tariffs. In the period 1981-2007, tariff reduction has been applied by both groups – developed and developing countries (Figure 1), delivering serious drop of the average tariff rate of developing countries from 30% in 1981 down to 10% in 2007.

Figure 1: Trends in average applied tariff rates in developing countries and developed countries, 1981-2007 (unweight, in %)



Source: <http://siteresources.worldbank.org/INTRES/Resources/469232-1107449512766/tar2007.xls>

Less intense tariff cuts have been registered by developed countries due to higher level of trade openness of these countries prior to the analysed period. In addition, many developing countries have acquired GATT/WTO membership in the 1980s and 1990s, implying process of gradual alleviation/removal of tariff protection, which led to the intense trade liberalisation of the developing countries after 1990. The trade liberalisation induced significant changes in the trade behaviour of the developing countries. GATT/WTO membership enabled wider access to foreign markets in developing countries, while descending tariff rates served as impulse for export penetration.

Implicitly, the export of the developing countries surged dramatically (Table 1). As shown in the Table 1, the share of the developing countries into the total world export rose from 29.6% in 1980 to 44.8% in 2013, while the share of the developed countries' export fell down from 66.2% in 1980 to 50.9% in 2013. The major reasons for such changes could be located into the growing importance of BRIC (Brasil, Russia, India, China) countries as trading nations, in particular China. More specifically, China alone increased its share in world exports from 0.9% in 1989 to 10.4% in 2011. India recorded a more modest increase from 0.4% to 1.7% over the same interval, while Brazil export share rose from 1% to 1.4% over the period. In addition, Russian share in world exports was 2.9% in 2011.³

Table 1: Share of exports of developing, developed and transition economies in total world exports

Region	1980	1990	1995	2000	2005	2007	2008	2009	2010	2011	2012	2013
World	100	100	100	100	100	100	100	100	100	100	100	100
Developing economies	29,6	24,1	27,7	31,9	36,3	37,8	39,0	39,9	42,1	43,1	44,7	44,8
Transition economies	4,2	3,4	2,3	2,3	3,4	3,8	4,5	3,7	4,0	4,4	4,5	4,3
Developed economies	66,2	72,5	70,0	65,8	60,4	58,3	56,5	56,4	53,9	52,5	50,9	50,9

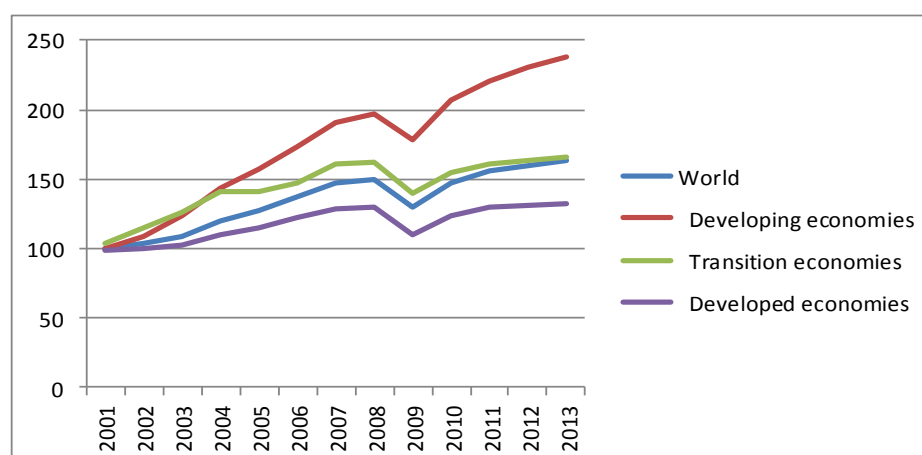
Source: Calculations based on data from UNCTADStat

The increase of the share of developing countries' exports into the world exports has been particularly intense after 2000. Figure 2 shows that the exports from the developing countries rose for over 140% in the period 2000-2013, registering considerably higher growth compared to exports from developed countries (35%), as well as total world export (around 60%). This trend corresponds to the data presented in the Table 1 and implies deduction about strengthened position of the developing countries into the international trade system over the analysed period. However, another aspects needs to be taken into consideration with regards to more realistic assessment of the trade position of the developing countries. It should be stressed out that the share of

³ World Trade Report 2013: Factors shaping the future of world trade, WTO, Geneva, 2013, p.60.

developing economies in world output rose to 40% from 23% between 2000 and 2012.⁴ This is a large increase, but it illustrates that developing economies are still responsible for less than half of world income.

Figure 2: Percentage change in exports of developed countries, developing countries and economies in transition: 2000-2013 (index 2000 = 100)

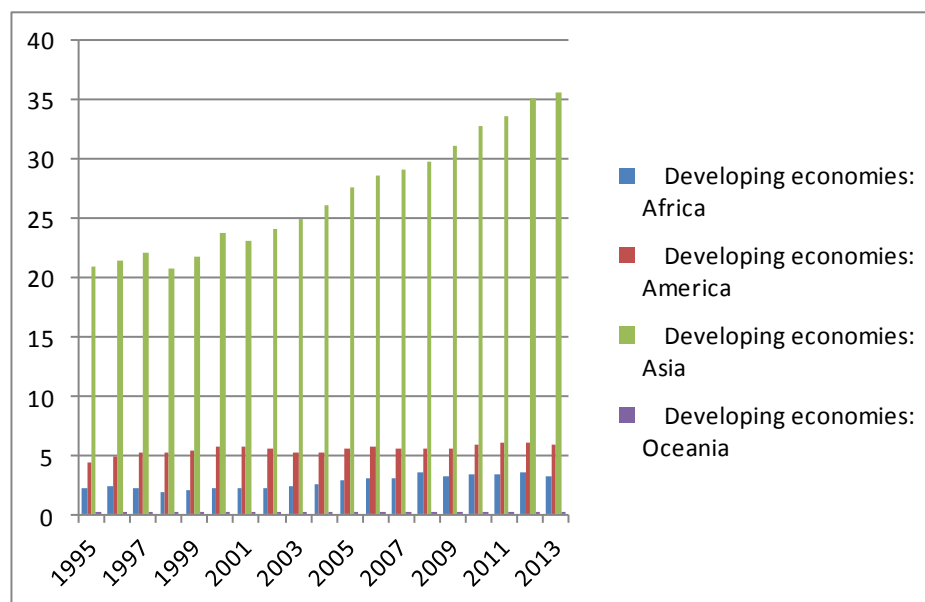


Source: Calculations based on data from UNCTADStat

Furthermore, it should be noted that not all developing countries equally participate in international trade. Figure 3 provides an overview of exports from developing countries, classified according to the geographical regions. Asia is by far the most important export region in the group of developing countries, which share in the world exports rose from 21% to 35% over the period 1995-2013. This is mainly due to China's exports expansion, as mentioned above. Opposite to Asia, Oceania had insignificant share in world exports close to zero, while Africa had small share of around 3% in the world exports over the period 1995-2013. Certain increase of the share of exports from developing countries from American continent have been registered over the analysed period, although its overall share remained modest 5-6% of the world exports.

⁴ World Trade Report 2014: Trade and development-recent trends and the role of the WTO, 2014, p.60.

Figure 3: Participation of developing countries in the value of world exports, by region, 1995-2013

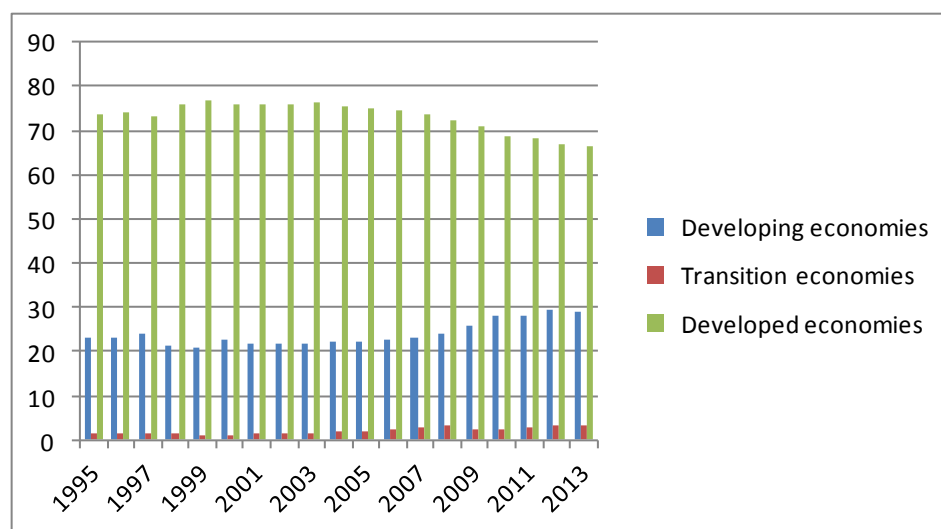


Source: Calculations based on data from UNCTADStat

Despite the predominance of Asia in the relative share of developing countries in the world exports, there has been an increase in absolute value of the exports of all developing countries. This implies that the position of the developing countries in the world trade system could be analysed from the perspective of their importance as export destination for developed countries. As indicated on the Figure 4, the share of the developed countries' exports into developing countries has moderately increased from 22% in 1995 to 28% in 2013, on the expense of the share of developed countries which dropped from 73% in 1995 to 67% in 2013. On the other hand, the exports from developing to developed countries declined from 57% in 1995 to 39% in 2013, indicating shift of the export focus of the developing countries towards other developing countries. These data imply that export surge of the developing countries registered in the period 1981-2013 was mainly based on increase of trade among developing countries (so called "South-South" trade) and did not lead to significant promotion of the trade among developed and developing countries. Nevertheless, developed countries remain main export target to the developing countries, due to

their higher purchasing power. In this context, it would be interested to provide brief analysis of trade structure of developing with developed countries.

Figure 4: Share of exports of developed countries by groups of countries in total exports, 1995-2013



Source: Calculations based on data from UNCTADStat

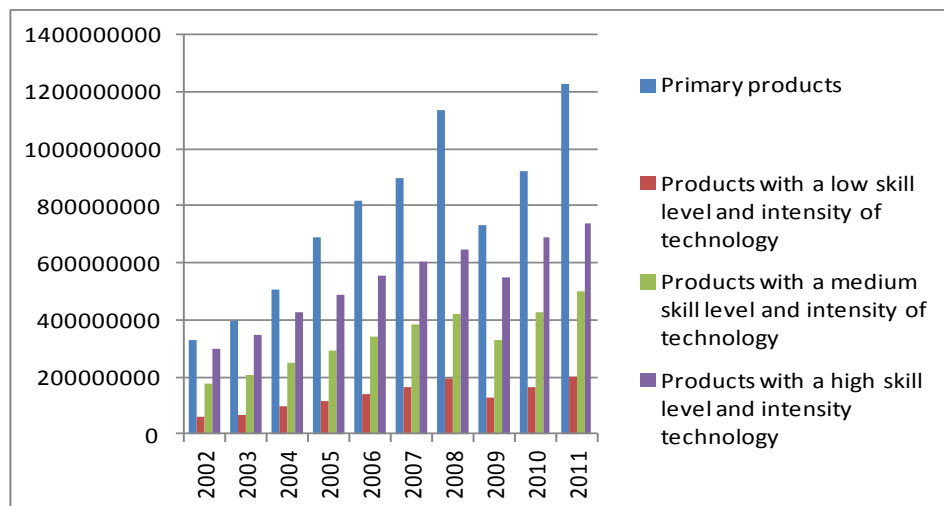
The export and import structure of the developing countries to/from developed countries in the period 2002-2011 is presented on Figure 5. It could be noted that primary products (oil, agricultural products, etc.) dominate in the export structure, followed by products based on high and medium skill level and technology intensity. Products based on low skill level and technology intensity have been on the bottom of export structure of developing countries towards developed countries over the analysed period. This structure could be explained with the tendency of the developing countries to primarily export higher value added products to the developed markets, due to their higher purchasing power. In addition, many FDI plants in the developing countries which produce medium and high skill level products originate from developed countries, which usually reflects into an export orientation of the FDI plants to the countries of origin. Developing economies absorbed more than half of global FDI inflows in 2012, versus

less than 20% in 2000.⁵ FDI outflows from developing countries also increased significantly during the 2000s. The share of FDI outflows from developing countries grew from 7% at the end of the 1980s to 34% in 2012.⁶

The FDI trends have also marked the import structure of the developing countries. As shown on the Figure 5, products based on medium and high skill level and technology intensity dominate into the import structure, followed by primary products and low skills level products. The changes into import structure of the developing countries are mostly derived from the increased imports of the components for FDI plant's production. For illustration, the developed economies contributed to almost two-thirds of the world imports of intermediate inputs in 1996 but less than a half in 2012. The decrease in advanced economies' share of trade in parts and components is mainly due to the increase of imports of developing economies. China is the main driver of the increase in the share of trade in parts and components of developing countries. Its share increased almost fivefold, from around 3 per cent in 1996 to more than 15 per cent in 2012.⁷

Figure 5: Exports and imports of developing countries to/from developed countries, 2002-2011 (in thousands of dollars)

Exports

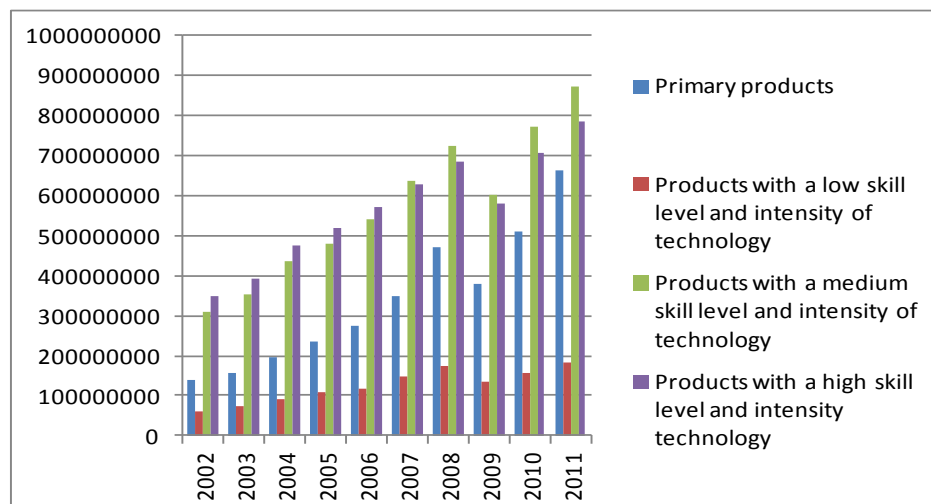


⁵ Ibid, p.81.

⁶ Ibidem.

⁷ Ibidem.

Imports



Source: Calculations based on data from UNCTADStat

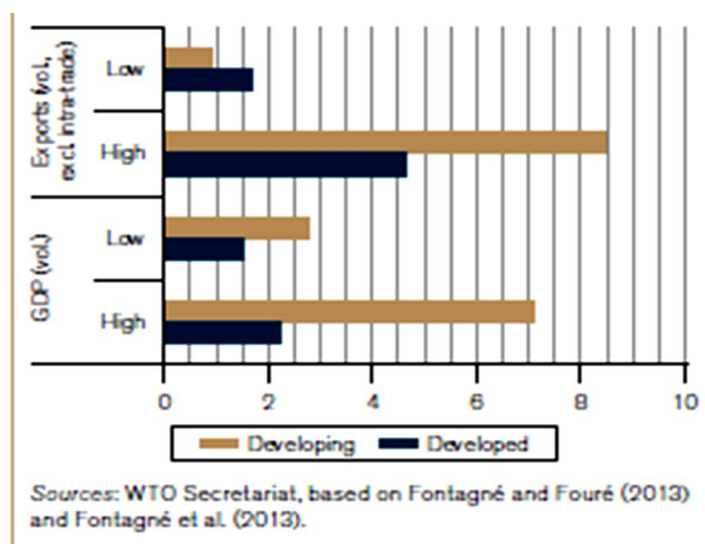
Based on the presented data, the analysis related to the position of the developing countries in the international trade system could be summarized into two major findings. The first one indicates that developing countries as a group have increased their importance in the international trade, evident through higher share in the world exports, as well as increased share in FDI and world imports of intermediate goods. The second finding shows that positive changes in the position of the developing countries in the international trade have been driven only by minor group of countries. These findings affects the discussion about the perspectives of the developing countries in the international trade system, as genuine improvement of the trade position of majority of the developing countries is still to be achieved.

2. Perspectives of developing countries in the international trade system

In the World Trade Report 2013, WTO has made simulations about the future of the international trade up to 2035. The Report provides two scenarios – optimist and pessimistic, with distinction of developed and developing countries. The simulations took into consideration many factors and trends affecting the international trade

and therefore, they could serve as a solid ground for discussion about the perspectives of the developing countries in the international trade system. Figure 6 presents combined macroeconomic and trade simulations in terms of projected average annual growth rates of GDP and exports up to 2035. It shows that exports are likely to be much more volatile than GDP, growing more than GDP in the “optimistic” scenario and shrinking further than GDP in the “pessimistic” scenario. The variation is much greater for developing than for developed countries, which have a lot more to gain from a strong economic and open trade environment in the future and more to lose in a pessimistic protectionist scenario.⁸

Figure 6: Predicted annual growth rates of exports and GDP, average 2012-2035 by country group (per cent)



Analyzed by countries that play significant role in the international trade, both WTO scenarios confirm further importance of China for the developing countries. In the optimistic scenario, China could increase its export share to almost one-quarter of global trade, while India could more than double its share, to 5 per cent. Although the shares of major developed countries are foreseen to decline, the absolute values of both their exports and GDP would continue to increase. In case

⁸ World Trade Report 2013: Factors shaping the future of world trade, WTO, Geneva, 2013, p.98-99.

of pessimistic scenario, China is expected to be particularly affected, losing not only the export market share, but also the absolute export value compared with the present day.⁹ This indicates that the position of the developing countries as a group would be still determined in the same manner, i.e. from the trade performances of few developing countries. In this context, the genuine effects on the other developing countries from the changes in the international trade system would depend on the possibility for increase of the “South-South” trade (trade among developing countries). Under the “low scenario”, WTO predicts that the North-North trade would remain the dominant direction of trade at over 40% and South-South trade would retreat slightly to just 18% in 2035. On the other hand, the “optimistic” scenario provides hope for developing countries, as these positions are inversed – the trade among developing countries is expected to rise up to 43% out of the total trade, while trade among developed countries would constitute about 17% in total trade in 2035. It should be noted that this scenario has been largely built on the increased relevance of intra-industry trade and increased participation of developing countries into global supply chains, as well as expectations of increase of the multilateral trade, despite the current trends of trade regionalization.¹⁰

The simulations about the prospects of the international trade confirm that the position of the developing countries would further primarily depend from trade performances of China and other large developing countries. Implicitly, genuine improvement of the position of other developing countries require more institutional attention by WTO. In this context, WTO conditions for developing countries would be briefly discussed. As noted above, tariff protection under WTO has rapidly decreased over the last three decades, opening up additional trade opportunities for developing countries, but also increasing their exposure to the international competition. However, the WTO allows for various types of flexibilities for developing countries.¹¹ Several WTO provisions are of special interest to developing countries, such as provisions that aim at addressing their resource constraints through longer transition periods and technical assistance. Furthermore, special flexibilities are granted to developing countries to restrict imports and promote exports, and to

⁹ Ibidem.

¹⁰ Ibidem.

¹¹ World Trade Report 2014: Trade and development-recent trends and the role of the WTO, 2014, p.194.

leverage the development potential of the agricultural sector. Finally, special and differential (S&D) treatment with regard to market access in developed partner countries can also provide development benefits. The rationalities for flexibilities for developing countries provided by WTO are related to small economic size of many developing countries, challenges in their political economy due to weak governments and uncertainty of the their policies, resource constrains, as well as various market failures. Use of these flexibilities could be certainly beneficial for developing countries, but it's often related to the capacity of the country for their implementation.

Apart from these flexibilities that provide favorable framework for developing countries, the WTO system has still not provided better terms of trade for major export category of many developing countries – agricultural products (as part of primary products). The negotiations related to agricultural products have been on-going since 2001 (Doha round), indicating the complexity of reaching the consensus over trade in agricultural products. Meanwhile, the average tariffs on agricultural products applied from developed countries to the imports from developing countries have declined from 9.2% in 2000 to 7.2% in 2011.¹² For comparison, the tariffs on industrial goods (with exception of textile and clothing) have been 0.8% in 2011 (down from 1.2% in 2000). In this context, tariffs on agricultural products still represent significant trade obstacle for developing countries. Furthermore, developing countries cope with non-tariff barriers, which has been recognized as major obstacle of temporary international trade system. Non-tariff barriers have been applied with regards to agricultural products, as well as to manufactured products. The issue of non-tariff barriers is expected to be predominant in the upcoming years, implying further efforts for setting a more effective system of international trade. In addition, particular challenge with regards to the prospects of the developing countries in the international trade would be pressure imposed within the group of developing countries, primarily from China, India and other larger developing countries. As shown above, the position of the developing countries has been primarily determined by few large economies, implying the need for differentiated treatment and provision of extra flexibilities for the other developing countries, in purpose of alleviating the differences among them and creating preconditions to boost their development.

¹² Ibid, p.200.

Conclusion

In the past three decades, the developing countries undertook intense trade liberalisation which led to significant decrease of their average tariff rates from 30% in 1981 to 10% in 2007. The trade liberalisation enabled the developing countries more active participation into the world trade, evident through increase of their exports for over 140% in the period 2000-2013. Implicitly, the share of the developing countries' export into the world export increased from 29.6% in 1980 to 44.8% in 2013. However, these data should not be taken as a sole indicator for improvement of the position of the developing countries into the international trade, as the positive change has been primarily driven by trade performances of few large developing countries, in particular China. More specifically, China's share in world exports rose from 0.9% in 1989 to 10.4% in 2011. In this context, Asia has been the most important export region in the group of developing countries, which share in the world exports rose from 21% to 35% over the period 1995-2013. Important changes were also registered with regards to export destinations of the developing countries, as the exports from developing to developed countries declined from 57% in 1995 to 39% in 2013. This indicator implies that export surge of the developing countries registered in the period 1981-2013 was mainly based on increase of trade among developing countries.

However, having in mind the overall increase of the trade in the analysed period, the trade of developing with developed countries rose in absolute terms. With regards to the export and import structure of the developing countries to/from developed countries in the period 2002-2011 primary products (oil, agricultural products, etc.) dominated in the export structure, followed by products based on high and medium skill level and technology intensity. This structure could be linked with the exports from FDI plants in the developing countries that produce medium and high skill level products. Developing economies absorbed more than half of global FDI inflows in 2012, versus less than 20% in 2000. Furthermore, the FDI trends have also affected the import structure of the developing countries, as products based on medium and high skill level and technology intensity dominate into the structure, mostly due to the imports of the components for FDI plant's production.

The presented analysis in this paper led to two major findings. The first one indicates improved overall position of the developing

countries in the international trade, evident through higher share in the world exports and world imports of intermediate goods. The second finding shows that positive changes has been caused mostly by trade performances of several developing countries, primarily China, leaving many challenges for other developing countries to improve their position into the international trade system. However, such trend of reliance of the trade position of the developing countries from the China's trade accomplishments is likely to continue in the future. WTO simulations about the prospects of the world's trade up to 2035 confirm that, implying that there is a need for more intense use of the existing instruments for trade support, as well as differentiated treatment and provision of extra flexibilities for the other developing countries and encouraging more intense integration of the developing countries into the global supply chains.

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Original scientific paper

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THE ROLE OF THE INTERBANK FOREIGN EXCHANGE MARKET IN MAINTAINING THE STABILITY OF THE DOMESTIC CURRENCY

Abstract

The main goal of this paper is to evaluate the current foreign exchange market setup, with a particular focus on the organization of the interbank foreign exchange market in the Republic of Macedonia. The stability of the domestic currency is particularly important for the Macedonian economy, having in mind the selected monetary strategy of exchange rate targeting for achieving the price stability. Hence, the first part of the paper discusses the openness, the euroization, degree of financial integration and the transmission effects of the exchange rate movements on the domestic economy as main determinants of the monetary strategy. Further on, taking into account the volume and characteristics of foreign exchange inflows and outflows in Macedonia, particular attention is paid to the interbank foreign exchange market, its organizational setup, and the role of the National Bank in maintaining the stability of the domestic currency. The analysis in the paper leads to the conclusion that while the turnover on the interbank foreign exchange market is still relatively small, it has a significant influence on the formation of the exchange rate on the overall forex market and has a strong signaling role for the Macedonian economy.

Keywords: *Foreign exchange market, fixed exchange rate, price stability.*

JEL classification: D470, F310

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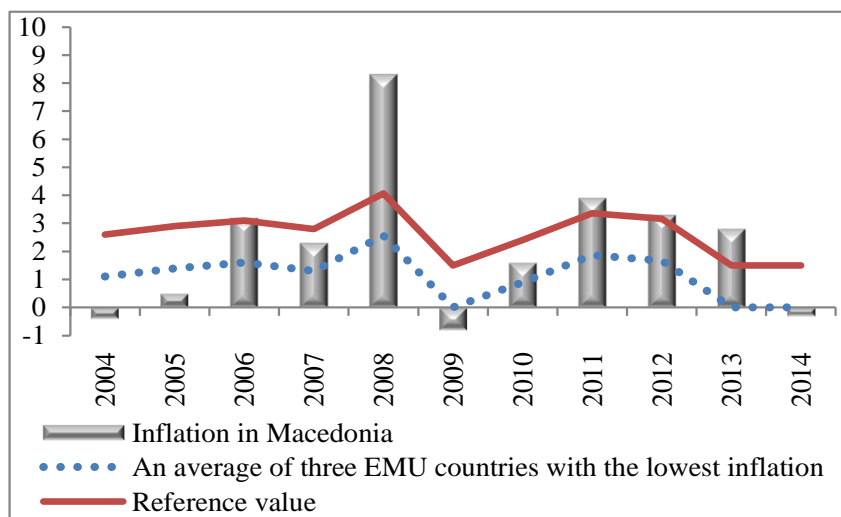
1. Determinants of the monetary strategy

According to Mundell (1961, p.657) and McKinnon (1963, p.772), the size and openness of the economy are the fundamental determinants of the monetary policy strategy, and in their papers they indicate that the fixed exchange rate strategy is suitable for small and open economies, while they recommend flexible exchange regime for large and relatively closed economies. Recent literature indicates that besides the structure and characteristics of the economy, the choice of the monetary strategy depends on the effects of the changes in the internal and external variables that can affect the domestic economy. In this respect, the practice has shown that countries that feature greater monetary instability and that are vulnerable to nominal shocks, should apply a strategy of a fixed exchange rate, which at the same time, would increase the credibility of the monetary policy. Also, the euroized and open economies that apply fixed exchange rate strategy have more advantages because the transmission effects of the exchange rate fluctuations are much stronger and the efficiency of the monetary policy is reduced. In highly euroized open economies the prices and the wages are indexed to the exchange rate, so the changes in the nominal exchange rate are not fully effected as changes in the real exchange rate, but in a relatively short period of time they are manifested as higher inflation. On the other hand, in the countries that are more exposed to real shocks (exporters of raw materials), the flexible exchange rate provides better external competitiveness of the country.

In Macedonia, the strategy of exchange rate targeting has been applied since 1995, i.e. the exchange rate of the Macedonian Denar against the German Mark and then, against the Euro is used as a nominal anchor for the monetary policy. Taking into account the characteristics of the Macedonian economy, the selected monetary strategy has proved to be one of the key factors which contributed for maintaining low and stable inflation in the country for a longer period of time. Since 2004, the average annual inflation has been 2.2%, while according to the reference value calculated from the three countries that have the best performances

in terms of price stability in the European Union³, Macedonia largely fulfils this convergence criterion.

Chart 1: Movement of the inflation in Macedonia relative to the reference value



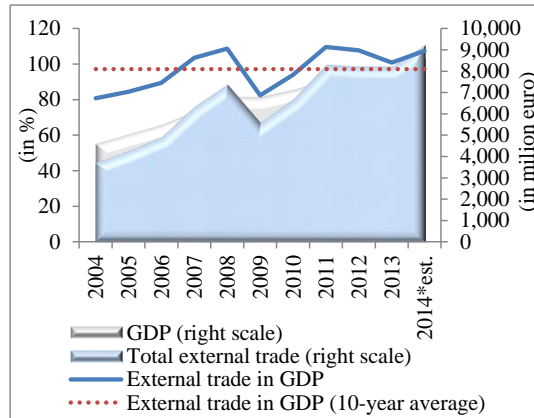
Source: NBRM (data on inflation in Macedonia) Eurostat (data on HICP in euro area countries), own calculations.

Given the European perspective of the country, which requires fulfilment of the convergence criteria as a necessary precondition for the future adoption of the Euro as the official currency, the maintenance of price stability is particularly important and therefore, it is primary objective of the monetary policy of the National Bank.

The openness of the Macedonian economy, which is reflected through high share of foreign trade, (on average 97% of GDP (2004-2014)), was one of the main factors for the implementation of the strategy of exchange rate targeting, as the best way for maintaining the price stability.

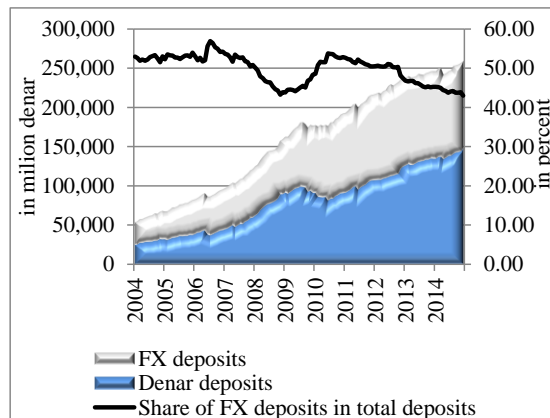
³ The criterion for maintaining price stability is one of the Maastricht criteria for membership in the European Economic and Monetary Union, which is calculated as the arithmetic mean of the average inflation rates of the three countries with the best performances for inflation, increased by 1.5 percentage points. The country that has a higher inflation than such determined reference value, does not meet this criterion.

Chart 2: Share of foreign trade in GDP



Source: NBRM, Ministry of Finance of RM, own calculations.

Chart 3: Share of Denar and foreign exchange deposits in the broad money



Source: NBRM - Depository corporations' Balance Sheets and Surveys

Within the foreign trade, the contribution of the euro was 79.3% (Ministry of Finance, October 2014, p.11) and its growing trend is an additional argument for prolonged implementation of the monetary strategy of exchange rate targeting. Given the high euroization of the economy, the stability of the domestic currency is particularly important, since as experience has shown, any uncertainty or doubt about the stability of the exchange rate, causes further increase of deposits in foreign currency. (Dimitar Bogov, 2011). Euroization of the Macedonian economy is evident from the high share of foreign currency deposits in

total deposits⁴, the share of the total private debt in the total external debt (50.4%, September, 2014)⁵, as well as from the participation of foreign exchange or indexed debt in the total public debt (64.1%, December 2014)⁶. Given that financial markets in Macedonia are still shallow and underdeveloped, the protection against currency risk through hedging is limited, and there is a high risk of spillover of the external shocks into the whole economy.

An additional argument for implementation of the exchange rate targeting is that the level of financial integration and linkages with the international financial markets are still very low, so the rule of "impossible trinity" can not be fully applied in the Macedonian economy (Shamloo, December 2011, p.12). This means that in case of a domestic shock, there is more space for autonomous monetary reaction because the link between the monetary policy and the level of international reserves is still relatively weak. In such circumstances, thanks to the fact that the key interest rate of the National Bank is not fully determined by the ECB rate, the monetary policy may freely respond without affecting the foreign exchange inflows.

In support of the implementation of the exchange rate targeting strategy are the results of the empirical analyses that examine the transmission effect of the exchange rate on the price movements in Macedonia. Given the stability of the exchange rate, Besimi (2004, p. 12) points out that because of the high transmission effect of the change in the exchange rate on prices, possible depreciation of the Denar against the Euro by 1% can cause an average increase in the prices of industrial products and of the retail prices by 0.52% and 0.39% respectively, with a time lag of one month. Jovanovic (2009) states that although the impact of exchange rate on net exports is small, it should be borne in mind that any depreciation of the domestic currency may have serious negative implications for the economy because of the loss of confidence in the national currency. Fetai (2011, p.12) indicates that import prices are a direct transmission channel through which the exchange rate affects inflation, so amid depreciation of the domestic currency against the euro, domestic prices might increase by approximately 0.59% over one month.

⁴ In the past ten years, the share of FX deposits in total deposits averaged 49.51%, but since the end of 2012, their share has been reduced, so in December 2014, it was 43.03% (NBRM).

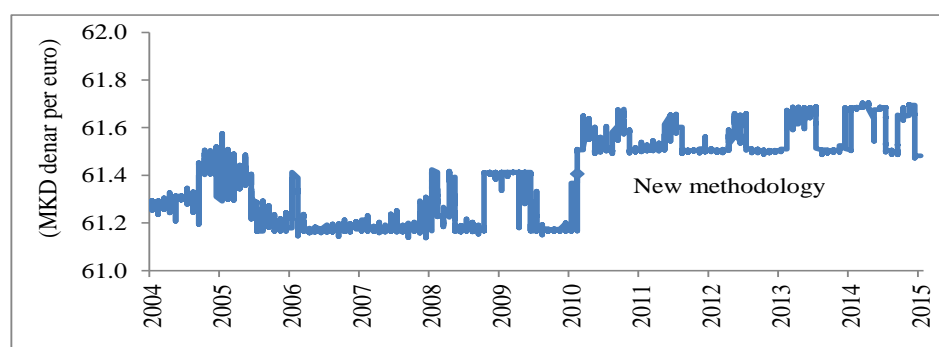
⁵ NBRM – Data on External Debt.

⁶ Ministry of finance – Main Macroeconomic Indicators and Projections.

2. Stability of the MKD denar and the impact of the FX flows

According to the de jure classification, the exchange rate targeting strategy belongs to the regimes of managed floating. This foreign exchange regime assumes that the path or target for the exchange rate is not pre-announced, but monetary authority affects its movement through interventions on the foreign exchange market. In practice, the regime implemented in Macedonia enters into the category of stabilized arrangements (IMF, AREAER 2014, p.6).

Chart 4: Movement of the MKD Denar exchange rate against the euro⁷



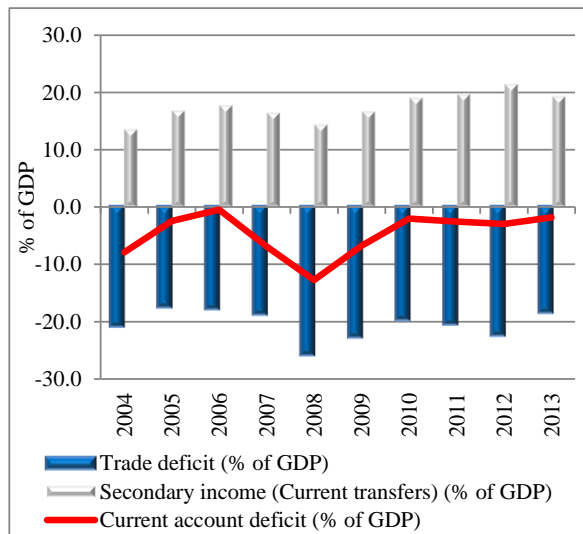
Source: NBRM – Exchange rate list

Since the introduction of the euro, the fluctuations of the exchange rate (Chart 4) are much lower than the anticipated margins under the definition of a fixed exchange rate of the IMF, which is also narrower than the Maastricht criteria for exchange rate fluctuations according to ERM II. However, it should be taken into account that long-term maintenance of the exchange rate within a narrow margin does not necessarily mean full sustainability of the monetary strategy. Namely, the high trade deficit, which has been held for a longer period (Chart 5), is a

⁷ Since the beginning of February 2010, the National Bank changed the methodology for calculating the average exchange rate. The middle exchange rate of the Denar against the Euro is calculated as the average of the quoted bid and offer rates of the market makers. Before, the average FX rate was calculated from the FX rates of the realized transactions in all currencies in the interbank FX market, including the interventions of the National Bank. All transactions were converted into euros, and by calculating the weighted mean, reduced by 0.5%, the average FX rate of the National Bank was obtained.

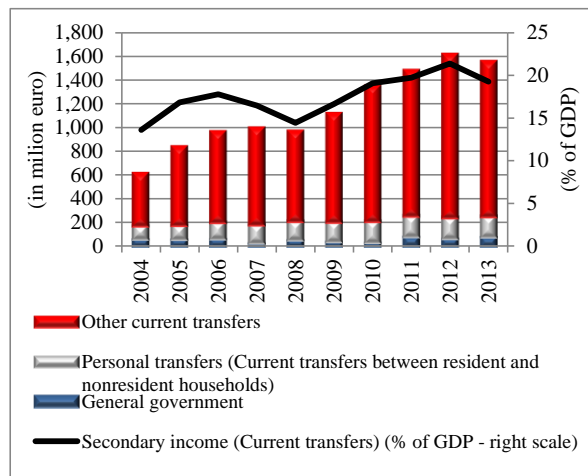
significant risk for the Macedonian economy. A large part of the negative trade balance, with about 80%, has been compensated by private transfers, which although quite volatile, still contribute for achieving relatively low current account deficit over the past few years.

Chart 5: Components of the current account of the balance of payments



Source: Authors' calculations using the NBRM Balance of Payments Statistics.

Chart 6: Components of the current transfers



Source: Authors' calculations using the NBRM - Balance of Payments Statistics.

In that sense, it can be concluded that the current transfers, as well as the foreign direct investment are particularly important for fixing these imbalances in the Macedonian economy. At the same time, many questions are raised and they are related to the uncertainty and continuity of foreign exchange inflows, to the need for their sterilization, as well as to the possibility of appreciation pressures of the domestic currency that are faced by many countries in transition. Therefore, the effectiveness of the National Bank interventions through the implementation of direct and indirect measures, as well as the possibility for their transmission to other sectors in the economy, are determined by the development of financial markets. Direct interventions are implemented through purchase and sale of foreign exchange by the NBRM at the interbank foreign exchange market, while indirect interventions are implemented through the instruments of the monetary policy, primarily through the interest rate policy.

Given the openness of the economy, high foreign exchange inflows and outflows, as well as the importance of the stability of the exchange rate for the domestic economy, further in this paper we will focus on the foreign exchange market, particularly on the interbank foreign exchange market. The interbank foreign exchange market is one of the most important mechanisms for allocation of the foreign exchange in the economy, for balancing the supply and demand, as well as for stabilization of the exchange rate movements, which is an intermediate target of the National Bank in the preserving of the price stability.

3. The role and importance of the foreign exchange market

Foreign exchange market is essential for the functioning of national economies. The turnover on the foreign exchange market arises from import or export transactions, borrowings of companies on the international financial markets, foreign direct investment or from investments in foreign securities by pension and investment funds. Also, a large number of transactions on the foreign exchange market result from the need of financial and non-financial companies to maintain low currency exposure of their assets and liabilities.

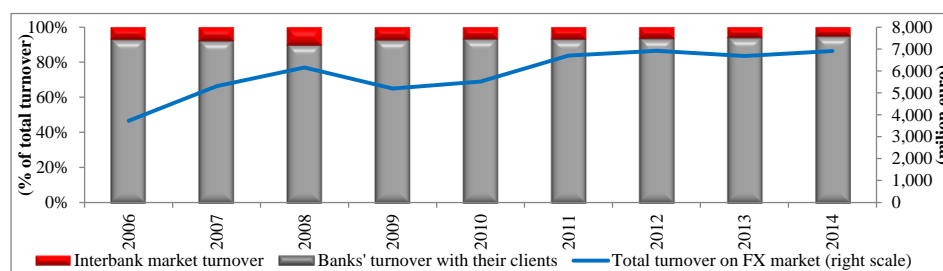
Generally, depending on the participants, the foreign exchange market may be divided in two segments: an interbank foreign exchange market, where the authorized dealers (banks) trade among themselves

and a market between the authorized dealers (banks) and their clients (legal and natural persons). The interbank foreign exchange market is particularly important for the economies. Usually, this market segment has a significant influence in the formation of the exchange rate, it is characterized by high trading volume (wholesale market), and thus contributes to the formation of the general perceptions of market participants about the movements on the entire forex market.

The development of the foreign exchange market is quite important, even in the countries where the strategy of exchange rate targeting is implemented, i.e. where the exchange rate is used as a nominal anchor for the monetary policy. Against such background, the central bank sets a horizontal band within which the exchange rate fluctuates. This creates a perception for risk or for achieving certain profitability, which additionally encourages the market participants to realize the interbank market transactions (Anna Nordstrom, Herve Ferhani, Mark Stone and Seiichi Shimizu, 2008). Thus, depending on the changes in supply and demand for foreign exchange, the fair market price could be achieved, which positively affects the private sector decision-making process, but also improves the formulation of the policy measures.

Given the monetary strategy of maintaining the exchange rate stability, the foreign exchange market plays an important role in the Macedonian economy. Although the turnover on the interbank foreign exchange market is relatively small (Chart 7), and it accounts for about 6% of the total turnover of the foreign exchange market (market between banks and their clients: companies, FX offices, and non-residents), it has a significant influence on the foreign exchange rate on the overall forex market and plays a signaling role for the Macedonian economy.

Chart 7: Turnover on the foreign exchange market



Source: NBRM - Foreign Exchange Market.

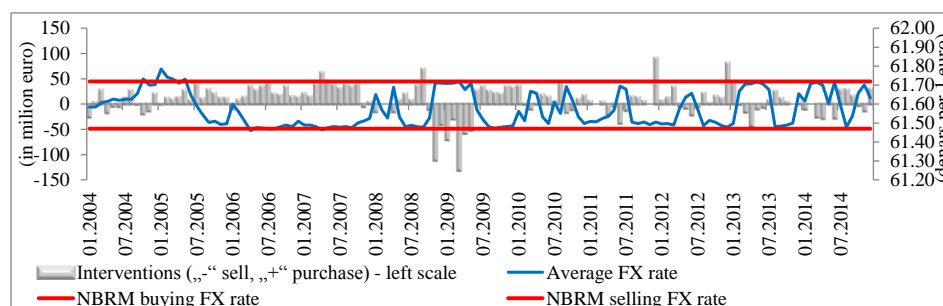
The banks in Macedonia are authorized participants in the foreign exchange market and they form the supply and demand for foreign currency for meeting their own needs and the needs of their clients. The clients are usually companies that require foreign exchange for settlement of their import payments or other financial institutions that are not participants in the interbank market (pension or investment funds, state or local institutions and individuals). Irrespective of whether the clients buy or sell foreign currency, all transactions have an impact on the foreign exchange position of the banks and accordingly, they affect the expectations for the future trends on the foreign exchange market. The foreign exchange position of banks is expressed in domestic currency and it is calculated for each foreign currency recorded in the bank's balance sheet. The bank can achieve long or short foreign exchange position depending on whether the foreign assets are greater or lower than the foreign currency liabilities. Given that the foreign exchange position is expressed in domestic currency, it is affected by the exchange rate and it shows the currency exposure of the bank. In this sense, given the regulatory restrictions on exposure to currency risk, each bank may decide to what extent it can enter into a long or short position for each currency and for each item in the balance sheet and depending on that, may adjust its behavior on the foreign exchange market. Depending on the current or expected market conditions, the banks may decide whether to buy or sell foreign currency, to quote higher or lower bid or offer FX rate, to maintain or increase the exposure to currency risk.

Trading on the interbank foreign exchange market is performed through an electronic platform that enables banks to follow current bid and offer rates. The electronic platform is actually a closed system where the banks have the right to trade with foreign currencies on certain rules. Under the rules, banks are obliged to quote bid and offer rates of Denars for euro and quotations are transparent and available for all participants at the interbank foreign exchange market. Also, from the most active banks, which have a significant share in the turnover on foreign exchange market, the market makers are selected. The banks that are market makers have an exclusive right to trade with the National Bank, but also

an obligation to participate actively on the market and to quote bid and offer FX rates in narrow spreads⁸.

The electronic trading platform allows the National Bank continuously to monitor the interbank market and actively participate in the market by setting bid and offer rates for the euro. The exchange rates that are quoted by the National Bank form the limits of the horizontal band within which the interbank exchange rate fluctuates. In a situation when the exchange rate on the interbank market is approaching the quoted rates, the National Bank intervenes through the market makers.

Chart 8: Interventions of the National Bank on the foreign exchange market and the movement of the exchange rate



Source: NBRM - Latest Macroeconomic Indicators, December 2014.

Besides the quotes of the exchange rates, the National Bank regularly monitors the volume of trading on the market, the supply and demand for foreign currency, and the foreign currency position of each bank. Upon the emergence of certain imbalances on the market, the National Bank intervenes at the request of the market makers or on its

⁸ According to the Market Maker Agreement, banks - market makers are obliged to quote bid and offer FX rates with a maximum spread of 0.05 Denars in the transactions between market makers, as well as in the transactions with the National Bank. For transactions with the other banks, market makers may put a wider margin, 0.25 Denars per euro, so a greater freedom for adjustment to the market conditions is given. At the same time, in order to provide greater liquidity and strengthening of the market, the minimal amounts for trading are set: for transactions between banks - market makers, the amount is 350,000 euros, and for transactions with the other banks, the amount is 30,000 euros. The higher trading amounts between banks - market makers should reflect the actual trends on the foreign exchange market, thus contributing to the market determination of the exchange rate, as well as to the transmission of the effects of transactions concluded in the interbank market, into the wider market segment, between banks and their clients.

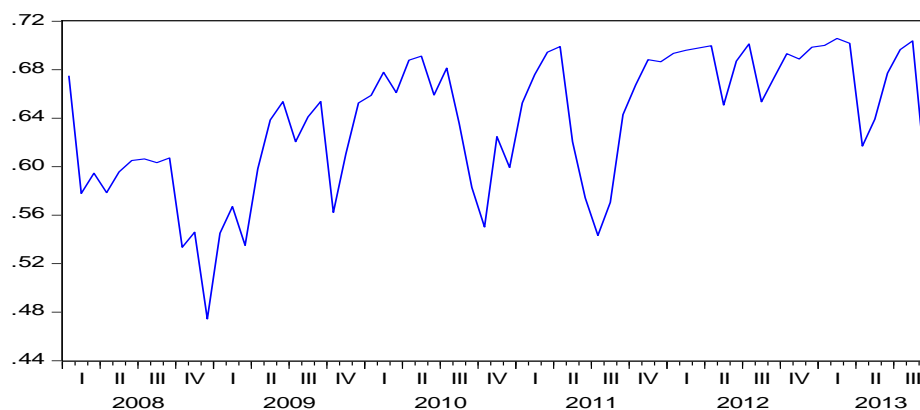
own initiative. If the exchange rate of the Denar against the euro rises, the National Bank sells euros to the banks - market makers and thus, by increasing the supply of euros, contributes to the weakening of the euro against the Denar and to returning of the market to balance. Considering the role and capacity as a central bank, the intensity of the influence of the National Bank on the foreign exchange market is very strong, not only because of the volume with which it intervenes on the market, but also because of the sales of foreign currency. These transactions reduce the Denar liquidity, increase the demand for domestic currency on the money market and contribute to the increase of the Denar interest rates, which further enhances the effect of the intervention. However, one should bear in mind that the effectiveness of the interventions of the National Bank greatly varies and depends on the general macroeconomic conditions in the country.

The benefits of the development of the foreign exchange market are multiple. The liquidity and the turnover on the foreign exchange market have significantly improved, the spread between the quoted bid and offer rates has narrowed, which is another indicator of market liquidity. The efficiency of the interbank market can be proved through the fast transmission of the effects of the transactions concluded between banks and between the banks and the National Bank to the overall foreign exchange market (market between banks and their clients: companies, FX offices, and non-residents). The high interdependence between these two market segments can be seen by using the econometric model BEKK GARCH, which is used in the analysis of market influences, i.e. for those segments where high spillover effect is assumed. The model indicates that there is a correlation between two market segments if the values are higher than 0.50, while if the values are higher than 0.70, the correlation is high. The analysis by using the BEKK GARCH model indicates that the correlation of the exchange rates realized on the interbank market and on the market between banks and their customers is quite high. For the research of this paper, the monthly changes of the exchange rates of the realized transactions in the interbank foreign exchange market and on the market between banks and customers were used, with each series being regressed to a constant (historical monthly change), which actually represents the average monthly change in the exchange rate.

The results of the BEKK GARCH model suggest that both markets are highly integrated and connected, and that there is

transmission of the signals from one to the other market segment. Also, given that the model analyzes the correlation of the two exchange rates during different periods of time, it may be concluded that the correlation is very high, especially since 2010.

Chart 9: Correlation between the change in exchange rates on the interbank FX market and on the FX market between banks and their clients



Source: Own calculations using BEKK GARCH model.

Conclusion

The need for continuation and intensification of the structural reforms, the reasonable expectations for achieving higher growth and the expectations for starting the negotiations for joining the European Union, the intensification of the process of the liberalization of capital flows, as well as the greater financial integration to the European capital markets, spotlight the question of the exchange rate and its role in mitigating the effects of foreign exchange inflows and outflows in the Macedonian economy.

The development of the foreign exchange market, especially the organizational structure of the interbank foreign exchange market, contributes to a better allocation of foreign assets. The interbank market in Macedonia is an adequate mechanism where the supply and demand for foreign currency are balanced, and at the same time, it is a place where the interventions of the National Bank are implemented. Upon the occurrence of certain market imbalances, excess or shortage of foreign

currency, the National Bank intervenes, thus contributing to the maintenance of the stability of the domestic currency.

Also, considering the integration and interconnection of the participants in the foreign exchange market, the effects of transactions concluded on the interbank market are quickly transmitted to the whole economy which allows stable and highly correlated exchange rates to be achieved on the overall forex market.

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Original scientific paper

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STRATEGIES FOR FUNDING ACCOMMODATION AND FOOD SERVICE ENTERPRISES IN THE REPUBLIC OF MACEDONIA

Abstract

In the performance of business activities and goals, enterprises use different approaches in managing inventories, receivables, liabilities and cash. By applying a certain approach to management of current assets and current liabilities, companies try to reach the desired balance between profitability and risk.

By combining different sources of funding, companies have the opportunity to apply a variety of funding strategies during the work operations. As it is the case with all companies, so it is with the accommodation and food service enterprises in Macedonia. The application of each type of funding strategy has positive and negative effects on the companies' performance, and that brings a different level of risk. The financing strategies also depend on the financial targets that the enterprises have set.

The purpose of this paper is to show the potential sources of funding, which are available to companies. Furthermore, the aim is to describe the characteristics, advantages and disadvantages that each potential source of funding has. Moreover, the aim of this paper is to portray the sources of financing the accommodation and food service enterprises of Republic of Macedonia. In other words, the companies use already implemented strategies for financing and thus, it is possible to recognize the approach the companies from the service sector have against the risk and profit.

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Keywords: financing, funding strategies, enterprises, accommodation and food service, Republic of Macedonia.

JEL Classification: G32

Introduction

Different strategies of financing have their positive and negative effects on the performance of companies, and bring different levels of risk. Using a strategy of funding depends on: the activities of the company, its size, the availability of certain funding sources, the targeted financial goals and growth the companies want to achieve, and the level of risk they are willing to undertake. Besides these factors, the choice of the financing strategy of an enterprise depends on the environment in which the company operates, especially in very complex national and international conditions of functioning.

When it comes to financing assets, companies can provide funds from various sources. Each of the sources of funding have certain advantages and disadvantages, so companies must determine the optimal structure of the sources of funding at certain time. Determining the right combination of funding, the actual strategy of funding is essential for companies. When choosing a specific strategy, the relationship between risk, return and liquidity is to be measured, because companies tend to choose the financing strategy that will optimize the relationship between profits and risk.

1. Definition and types of enterprises' funding strategies

When companies perform the business activities and accomplish the goals, they use different approaches³ in inventory managing, demands, liabilities and cash. By applying a certain approach in management of the current assets and current liabilities, companies are trying to reach the desired balance between profitability and risk.

When it comes to financing funds, the companies can provide funds from various sources. Each of the sources of funding has certain

³ Gallagher J. Timothy, Andrew D. Joseph: Financial Management (principles and practice), Prentice-Hall, 2006, p.484-485.

advantages and disadvantages and that is the reasons why companies must determine the optimal structure of the funding sources at the time. Determining the right combination of funding, the actual strategy of funding is essential for the companies. When choosing a specific strategy, the correlation between risk, income and liquidity is measured at first. That is why companies tend to choose a financing strategy that will optimize the relation between the profit and the risk.

The differentiation of certain strategies of financing the assets "starts from three assumptions: First, long-term sources of financial assets are more expensive than the short-term assets; Second, the profitability of the long-term sources is higher than the short-term sources; and Third, the risk of when the enterprise is financed with long-term funding sources is smaller than the short-term funding sources."⁴

There are three basic strategies in determining the combination of funding sources for the assets: aggressive strategy, conservative strategy and moderate strategy. Each strategy has positive and negative effects on the companies' performance and brings a different level of risk. Using a specific funding strategy depends on: availability of certain financing sources, the financial aims and the growth that companies want to achieve, with the level of risk they are willing to take in order to achieve the previously set aims.

1.1. Aggressive financing strategy

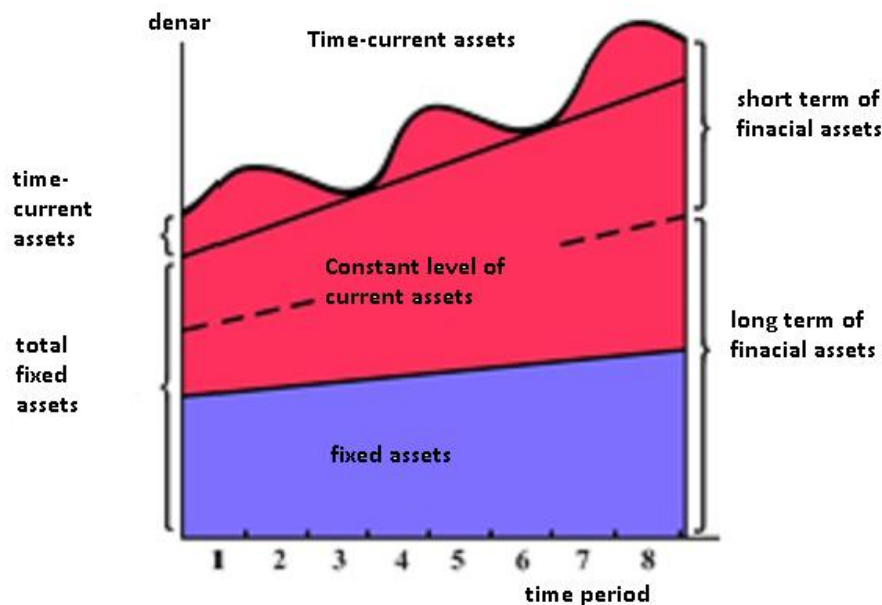
Aggressive financing approach means acceptance of greater risk by the company, pending the higher income.⁵ Companies using this strategy keep a low level of liquid assets on their own because the aggressive approach involves keeping a minimum level of liquid assets in order to minimize the excess liquid assets. This situation increases the potential risk when all obligations should be paid out. In order to increase the income, the available liquid assets are invested in long-term assets. Besides the minimum level of liquid assets, companies also keep a minimum level of stocks. **By keeping the minimum level the stocks are constantly decreasing.** On the other hand, the risk of lower sale is possible because of the potential lack of stock when they are needed. When it comes to financing the funds using the aggressive strategy of

⁴ Spasov S. Arsov S, Financing management, p.260.

⁵ Brigham F. E., Ehrhardt C. M.: Financial Management: Theory and Practice, 13th Edition, Sout-Western Cengage Learning, Mason, 2011, p.645.

funding, it means using short-term funding sources for financing the total capital, partial financing or total financing of the permanent working capital and perhaps part of the fixed assets (Figure 1).

Figure 1: Aggressive funding strategy



Source: Brigham F. E., Ehrhardt C. M.: Financial Management: Theory and Practice, 13th Edition, Sout-Western Cengage Learning, Mason, 2011, p.646.

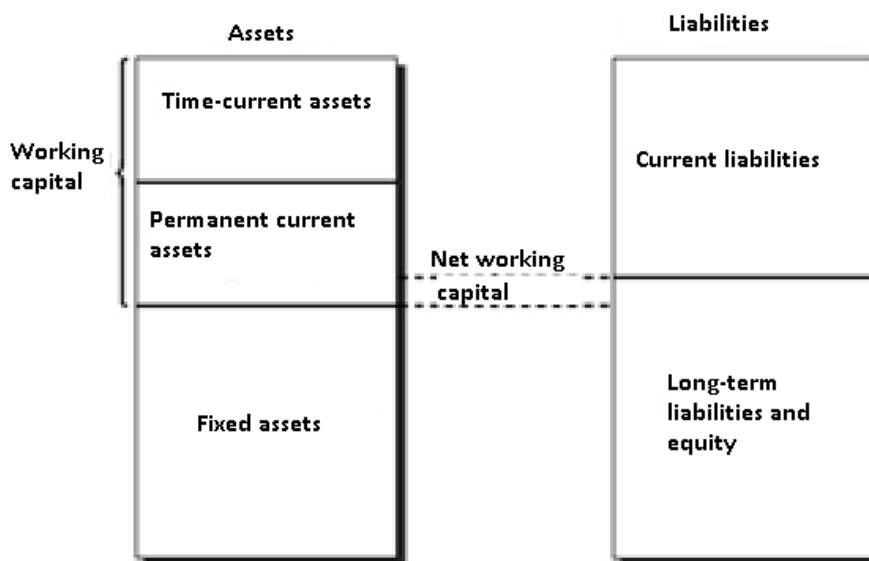
From the picture, it is evident that the aggressive funding strategy involves the use of short-term funding sources for occasional seasonal capital and even more for the permanent current assets. Moreover, the use of short-term funding sources using the aggressive funding strategy involves financing the permanent working capital and fixed assets. This kind of approach for financing current assets and a large part of permanent working capital from short-term sources apply lower costs of funding, but the risk increases when the funding is reducing the net working capital.⁶

Depending on the environment where the company operates, the dynamic generation of cash inflow and cash outflow and the appearance on different payouts and many other factors, makes keeping a small

⁶ Net working capital (NWC) is calculated as current assets minus current liabilities.

amount of net working capital very risky for companies.⁷ This is so because there is not enough cash between the amount of liquid assets and the amount of debt that has yielded in short term (Figure 2).

Figure 2: Net working capital in an aggressive strategy of funding



Source: Gallagher J. T., Andrew D. J. Jr.: Financial Management – Principles and Practice, Prentice Hall, New Jersey, 1997, p. 416

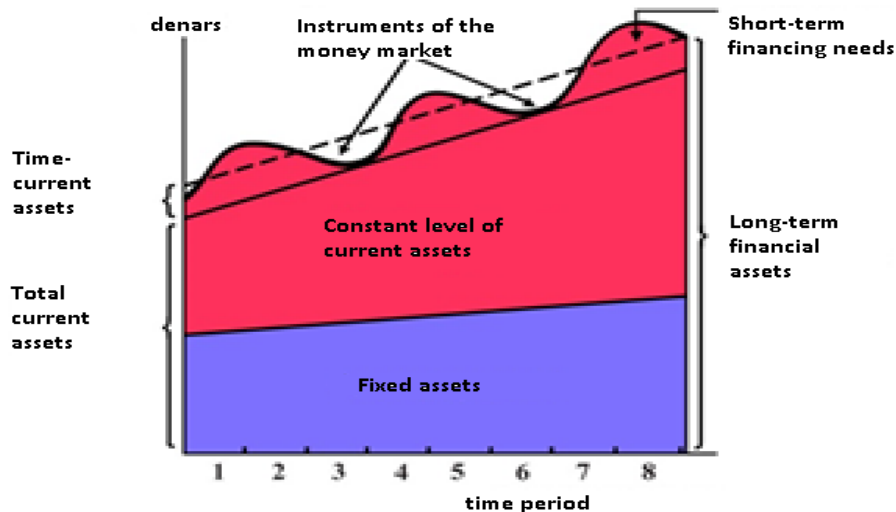
Companies can use more aggressive strategies from the ones portrayed in figure 2. In that case, despite the temporary working capital from short-term sources, it fully finances the permanent working capital. The net working capital will be at zero, the work is without security assets. Even more risky is the strategy that involves use of short-term sources of financing the fixed assets, which means creating a negative net working capital. This funding strategy is highly aggressive and the company could face major problems if loans are not renewed or if interest rates rises.

⁷Gallagher J. T., Andrew D. J. Jr.: Financial Management – Principles and Practice, Prentice Hall, New Jersey, 1997, p.416.

1.2. Conservative financing strategy

With the conservative financing approach, companies sacrifice parts of yield to be liquid. In other words, they have high amounts of financial assets and they store large quantities of stocks. Companies are protecting themselves from unexpected illiquidity because they have sufficient funds to pay for all their obligations and they have enough stocks to meet all the requirements. The conservative financing strategy means using the long-term sources to finance the fixed assets and the total current assets (permanent and temporary working capital). Short-term asset sources are intended only for the unforeseen and accidentally increased current assets and they are intended to maintain the liquidity in the form of securities (Figure 3).

Figure 3: Conservative strategy of funding

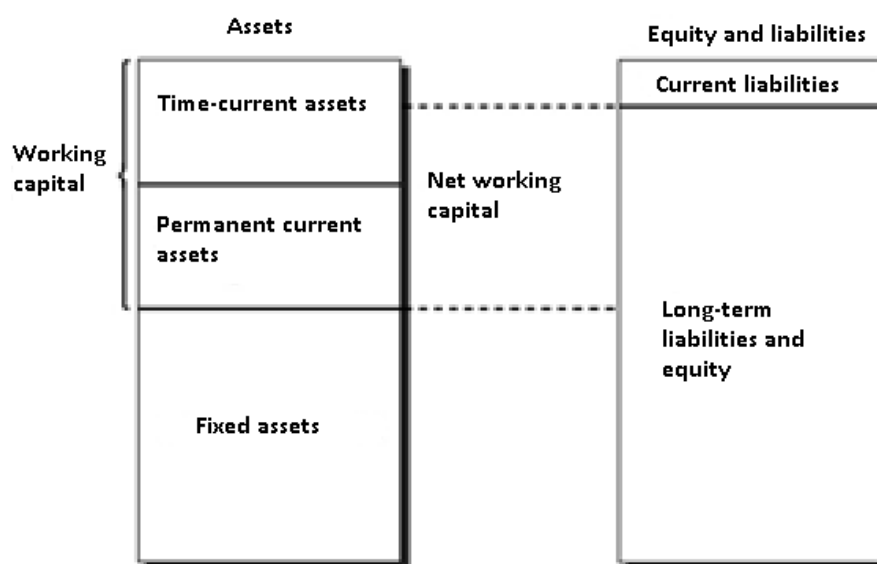


Source: Brigham F. E., Ehrhardt C. M.: Financial Management: Theory and Practice, 13th Edition, Sout-Western Cengage Learning, Mason, 2011, p.646.

It is evident that, given the conservative strategy of funding, all assets are financed by long-term sources. Only the amounts above the dotted lines are result of unforeseen needs for working capital and are financed by short-term financing sources. As a result, current assets exceed the current liabilities by a large margin and companies have a large amount of net working capital. The high amount of net working capital is relatively safe or it is at a risk-free position (Figure No.4)

because the enterprises have sufficient liquidity to be able to repay short-term debts.

Figure 4: Net working capital in the conservative strategy of funding



Source: Gallagher J. T., Andrew D. J. Jr.: Financial Management – Principles and Practice, Prentice Hall, New Jersey, 1997, p.417.

Same as the aggressive strategy, the conservative strategy included several types. The degree of conservativeness depends on the amount of the used long-term assets. The greater portion of long-term assets used in financing the current assets, the more conservative strategy is.

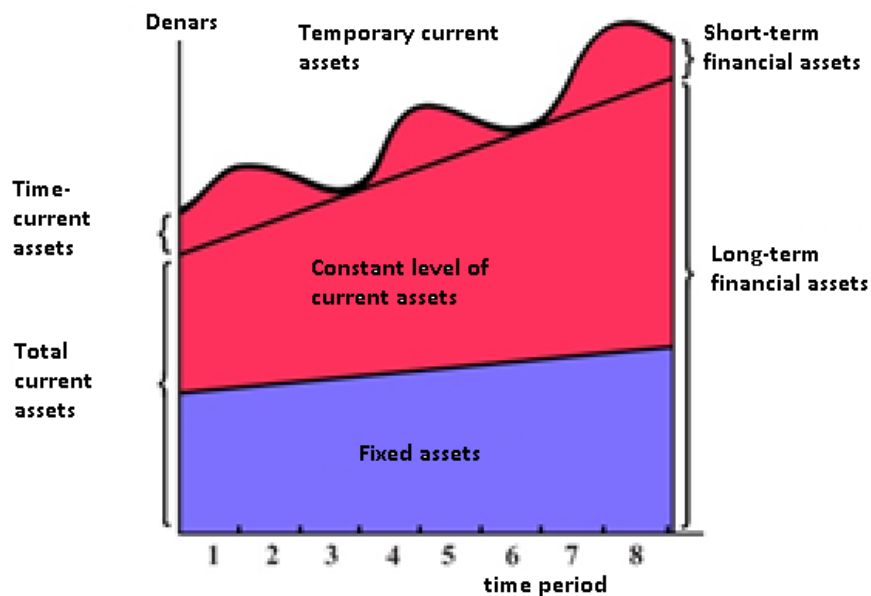
The conservative financing strategy is low-risk and relatively safe strategy. This strategy is most useful when the economy is in recession because the banks do not approve loans easily. In this case, companies that use conservative funding strategy will have sufficient liquidity to continue operating effectively, unlike the others, who will not be able to provide finances to purchase the necessary stocks, which will lead in reducing their business activities or being unable to pay out their employees. On the other hand, the security offered by the conservative strategy affects the income. Long-term financing is generally more expensive than the short-term financing and the company pays the

interest for funds that are not needed at a given moment. The use of long-term loans and capital to finance the necessary assets means engaging the financial assets that could be used in a more productive way.

1.3.Moderate financing strategy

The moderate funding strategy means that companies have an optimal attitude against the risk and the income. The moderate approach maintains the financial funds and stocks at a certain level, which is necessary to meet the enterprises' needs. This level is called "the permitted level" or a level that is close to the optimal one. When financing using the moderate strategy, known as a concept of equalization, means that the costs for the assets has to be equated with the time period for which those funds would provide an income (Figure 5).

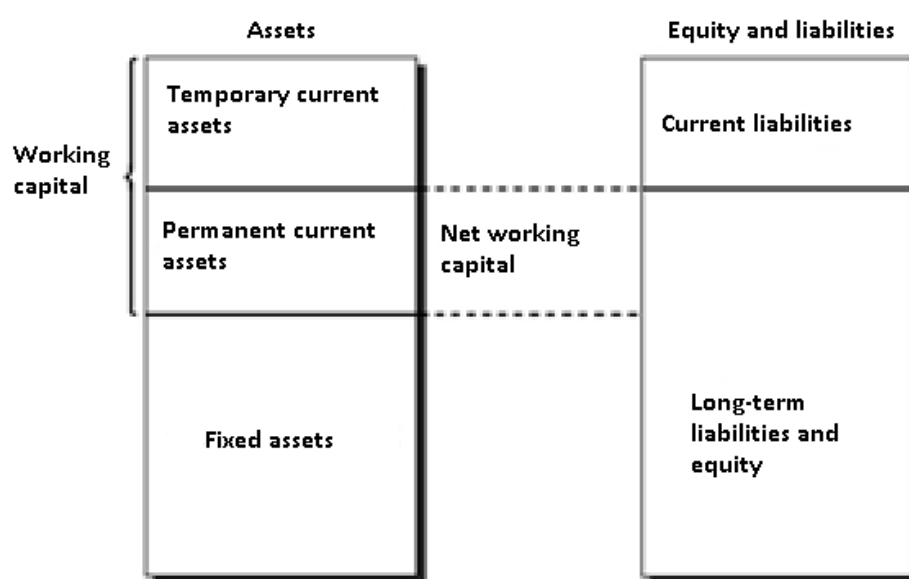
Figure 5: Moderate strategy of funding



Source: Brigham F. E., Ehrhardt C. M.: Financial Management: Theory and Practice, 13th Edition, Sout-Western Cengage Learning, Mason, 2011, p.646

It is evident that the enterprise's fixed assets and current enterprise's permanent assets are financed using long-term financing sources. Moreover, the enterprise's current assets are fully financed from the short-term financing sources. Moderate strategy implies equalization of assets with the fulfillment of all obligations (Figure 6). Also, the moderate financing strategy provides the enterprises with a reasonable amount of net working capital.

Figure 6: Net working capital in the moderate strategy of funding



Source: Gallagher J. T., Andrew D. J. Jr.: Financial Management – Principles and Practice, Prentice Hall, New Jersey, 1997, p. 418

In practice, it would very difficult to fully implement the moderate financing strategy, due to two factors. The first one is that the life of the assets is uncertain. The second one is that the enterprises have to use the common capital if they **do not reach the deadlines**. However, if the company applies the moderate funding strategy, or in other words it succeeds to reach the point of aligning the assets with the maturity of liabilities, then the case is about taking a relatively reasonable risk balanced with relatively reasonable expected income.

2. Empirical research of strategies for funding enterprises in accommodation and food service in the Republic of Macedonia

In order to perceive the situation about the company readiness when they expect a certain level of income and accept a certain level of risk, an empirical research was done. Thus, despite the theoretical approach for determining the operational approaches and financing strategies used by the enterprises in the accommodation and food service sector in the Republic of Macedonia, a quantitative research was also conducted. Data that are further analyzed in the paper are derived through research conducted by questionnaire in November 2014. The questionnaire was sent to 34 enterprises involved in accommodation and food service activities (selected randomly), of which 29 enterprises have provided the answers to the questionnaire .

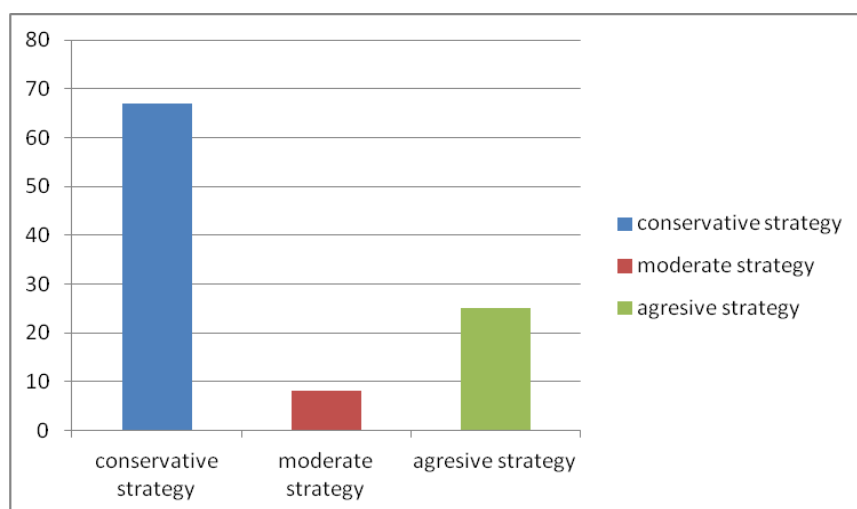
Due to the specifics of their activities, two-thirds of businesses in accommodation and food services, generally have low level of inventory and final products, or working capital at whole. One-third of enterprises have normal level of stock of working capital and final products. Most of these companies or 75% of them also keep a minimum level of liquid assets, while only 25% of them keep normal level of liquid assets . Just over 16% of the companies offer their customers restrictive payment terms, while a half of the rest of the enterprises provide normal conditions to their customers, and the second half provides flexible payment terms. More than 91% of companies have normal level of current liabilities, and only slightly more than 8% that have a minimum level of current liabilities. In order to pay current liabilities, a quarter of the companies do not need additional funds, about 67% of enterprises rarely need additional resources, and only slightly more than 8% often need additional funds to pay current obligations.

Businesses in accommodation and food services mostly use only their own funds to finance their operations. Namely, 42% of the companies use borrowed sources of funds, more than 60% of them use both short and long-term sources of funding, while the remaining 40% of the enterprises use both, short-term sources or only long-term sources of funding. Typically, more than 81% of these companies use their own funds or funds from long-term sources to fund ongoing working capital, while just over 18% of the enterprises use a large portion of funds received from short-term sources of funding for ongoing working capital.

Most of the enterprises finance their seasonal working capital using their own funds or funds from long-term sources, while short-term sources are used for funding seasonal working capital in 27% of the enterprises. Small section or about 25% of the companies say they sometimes use short-term sources for financing fixed assets, and no enterprises related to these activities invest in securities. The smallest part of all companies, or only a third of them are satisfied with their growth and development. Half of businesses are satisfied with the realized profit, but more than 67% of enterprises do not believe that they will earn a larger profit if they change the way of funding.

Because of the specifics of the enterprises in accommodation and food service activities, they are forced to apply an aggressive approach, less moderate approach and to avoid the conservative approach when working .

Chart 1: Strategies of funding enterprises in accommodation and food service activities



Source: Data obtained from research conducted

The results of empirical research present opposite situation when comes the question for financing assets (chart 1). Namely, two thirds of the companies or 67% apply conservative financing strategy, and more than 58% of companies use only their own finances or ultra conservative strategy. The aggressive strategy of financing funds use approximately 25 % of enterprises, while moderate strategy of funding more than 8 % of enterprises.

Conclusion

One of the most important decisions of the companies is choosing an appropriate way of funding. The success of the enterprises depends on whether they will be able to align their funding needs with the funding sources in a way that best suits their needs, because not all of the resources are appropriate for every company in a certain time. Sources of funding actually show how enterprises provide assets for their needs. Each separate source of funding has its own characteristics and therefore they are classified according to different criteria. Selecting certain sources of funding, i.e. a combination of funding sources, is an acceptance and implementation of a strategy of funding. Each enterprise tries to select such a financing strategy that at a given moment will optimize the relationship between profits and risk .

In general, because of the specifics of enterprises in accommodation and food service, enterprises are forced to apply an aggressive approach, less moderate approach and to avoid the conservative approach when working. In the Republic of Macedonia there is an opposite situation in the enterprises that provide accommodation and food services, where conservative strategy is dominant funding strategy. The results from the survey confirm the above mentioned conclusion, i.e. enterprises mostly use less risky and relatively safe strategy of funding.

- Very few enterprises use the moderate strategy of funding , which take moderate/reasonable risk and expect relatively reasonable yield,
- But some enterprises are willing to take risk, to exploit lower costs in order to make more profits i.e. aggressive strategy of funding despite the fact that the application of this strategy is not very common in such complex conditions.
- The majority of enterprises in accommodation and food service are financing only by their own funds, and some of them despite their own funds also use funds provided only by long-term sources.

It is evident that the benefits of running the conservative strategy of financing is most obvious when the economy is in transition, because then banks do not approve loans very easily. In that case, companies tend to use conservative funding strategy in order to have more reserves of liquid assets to avoid hindering the maintenance of continuity in its

operations, otherwise enterprises would not be able to fund its ongoing activities.

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Original scientific paper

Natasha DANILOSKA¹⁾

**INTERNATIONAL TRADE WITH FOOD AND AGRICULTURAL
PRODUCTS: ASPECT OF NONTARIFF BARRIERS**

Abstract

Focusing on international trade with food and agricultural products, this paper aims at addressing issues related to sanitary and phytosanitary measures and regulations and discusses whether or not they are acting as nontariff barrier, especially for developing countries. Such measures, designed to ensure food safety, consumer protection, and plant and animal health, are regulated by two agreements annexed to the general trade agreement: the Sanitary and Phytosanitary (SPS) Agreement and the amended Technical Barriers to Trade (TBT) Agreement. In order to ensure fair trade and market access, both agreements provide special assistance to developing countries. Following the introduction, this paper will provide an overview of the SPS and TBT agreements and will addresses the issue on whether or not the new trading environment with agricultural and food products has been favourable to developing countries. In this sense, the paper tends to identify the problems that limit participation of developing countries in the SPS and TBT Agreement and their concerns about the way in which it currently operates. It concludes with discussion of possible actions that will enhance effectiveness of the agreements and will foster fair trading environment for developing countries.

Key words: international trade, food quality, food safety, SPS, TBT, developing countries.

JEL classification: Q1, Q17, Q19

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Introduction

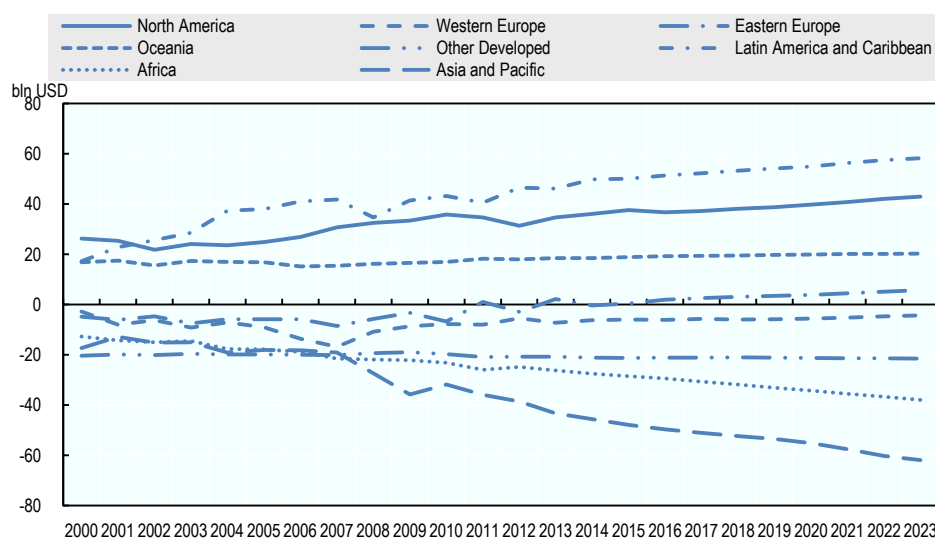
After the conclusion of the Uruguay Round in 1994 and creation of the World Trade Organization in 1995, international trade with food and agricultural products was left with remarkable reduction of tariffs and quantitative restrictions. A key factor in this was the liberalization of trade with agricultural and food products through the General Agreement on Tariffs and Trade (GATT), and in particular the Sanitary and Phytosanitary (SPS) Agreement and the Technical Barriers to Trade (TBT) Agreement, that were signed as annexes to the general trade agreement. As a consequence to this, over the past 50 years considerable progress has been made in lowering barriers to trade, such as tariffs and quantitative restrictions. This was a benefit for developing countries' export performance. Participation in international trade is generally recognized to favor economic growth, and due to the link with the rural economy, this is especially valid for agricultural export. However, it is argued that the gains from trade liberalization are offset by increasing food standards, which are mainly imposed by high-income countries which have dominating position in the world's food trading system. This point of view reflects wider recognition that technical measures can employ, either explicitly or implicitly, as a barrier to trade in a similar manner to tariffs and quantitative restrictions.² Since the "traditional" restrictions on trade with agricultural and food products were liberalized, attention has been focused on technical measures such as food safety regulations, labeling requirements, and quality and compositional standards. These standards are argued to act as new barriers to developing country exports. Moreover, others argue that high standards concentrate on the benefits of trade with processing and retailing companies and large farms, thereby casting doubt on the development impact of increased agricultural exports from developing countries.³ As a consequence, standards would lead to an unequal distribution of the gains from trade and result in the marginalization of poorer farmers and small agri-food businesses.

² Spencer Henson: *How do Exporters in Developing Countries Choose Where to Source, and Who Benefits?*; Institute of Development Studies (IDS), University of Sussex, January 29, 2009.

³ Peter Greenhalgh: *Trade Issues Background Paper: Sanitary and Phyto-Sanitary (SPS) Measures and Technical Barriers to Trade (TBT)*; FAO, July, 2004.

Recent analysis by the FAO shows that rising income levels and a growing global population that is increasingly urbanising, especially in populous developing countries, together with increasing non-food use of agricultural products, will require a substantial expansion of production and distribution through the coming decade. Food availability in developing countries will need to increase almost 60% by 2030 and to double by 2050, equivalent to a 42% and 70% growth in global food production, respectively.⁴ This projection goes in favor of a conclusion that developing world remains the epicentre of most agricultural production growth. Accordingly, international trade from developing countries will likely have to grow significantly in order to distribute the additional production to the places where the demand is increasing. According to the projections made with calculating weighing exports and imports by the international reference prices for the period 2004-06, the traditional global export leaders will continue to dominate the world market, but the net trade in value term from developing regions also will grow more than 2% p.a. between 2011-13 and 2023 (Figure 1.).

Figure 1: Value of net-exports in agricultural and food products in the period 2000-2023



Source: OECD-FAO AGRICULTURAL (2014): *Agricultural Outlook, 2014-2023*.

⁴ OECD-FAO AGRICULTURAL (2014): *Agricultural Outlook, 2014-2023*.

This situation without any doubt creates a need for establishment of a multilateral framework of rules and disciplines that will ensure efficient trade with food and agricultural products, equity and fair access to markets for developing countries as main producers of agricultural and food products, and thus stressing even more the role of the SPS and TBT Agreements.

1. The Role of WTO: The SPS and TBT Agreements

Before establishment of the WTO in 1995, existing multilateral trade agreements were unable to control both the use and impact of standards and technical measures on neither trade, nor the numerous trade related international disputes. After a long and difficult process of negotiations, the WTO has provided a basic mechanism that can ensure transparency in implementation of the technical regulations and/or standards in the context of international trade with agricultural and food products. With coming into force of the SPS and TBT Agreement, WTO has established rules by which Member states can apply standards and technical measures in a manner that is not discriminative and is less trade-distortive. Both Agreements cover the full range of standards relevant to human, animal and plant health and wellbeing, as well as to labeling, consumer protection, biotechnology, food irradiation and the production of “organic” food. The core acquisition of this mechanism is that in case of promulgation of product standards and/or technical regulations that are not internationally accepted, Member states are required to notify these measures before their implementation under SPS and TBT Agreements.

Minding that main objectives of SPS Agreement are to protect and improve human and animal health and phytosanitary situation, and to protect Member countries from discrimination due to different sanitary and phytosanitary standards, the Agreement enables Member states to undertake appropriate measures for protection of human, animal and plant live and health, as long as they can be scientifically justified and proved not to be trade-distortive. In a same time, Member states are requested to recognize that measures proposed by other countries, even though different, can provide equivalent level of protection.⁵

⁵ General Agreement on Trade and Tariffs: The Results of The Uruguay Round of Multilateral trade Negotiations, The Legal Texts, Geneva, 1994, p.8.

The Technical Barriers to Trade (TBT) Agreement covers all products, including industrial and agricultural, and practically guarantees that regulations, standards, testing and certification procedures do not create unnecessary obstacles in international trade. Regarding agricultural products, the TBT Agreement includes the product characteristics, their related processes and production methods, nutritional content, labeling and other aspects not covered by the SPS Agreement. According to TBT Agreement, Member states shall ensure that their central government standardizing bodies accept and comply with the Code of Good Practice for the Preparation, Adoption and Application of Standards. Thus, unlike the SPS Agreement, TBT Agreement sets out a code of good practice for both governments and non-governmental or industry bodies to prepare, adopt and apply voluntary standards, without an explicit goal of harmonization, meaning it makes a clear distinction between mandatory technical regulations and standards that are voluntary.

2. Impact of SPS and TBT Agreement on Developing Countries Export

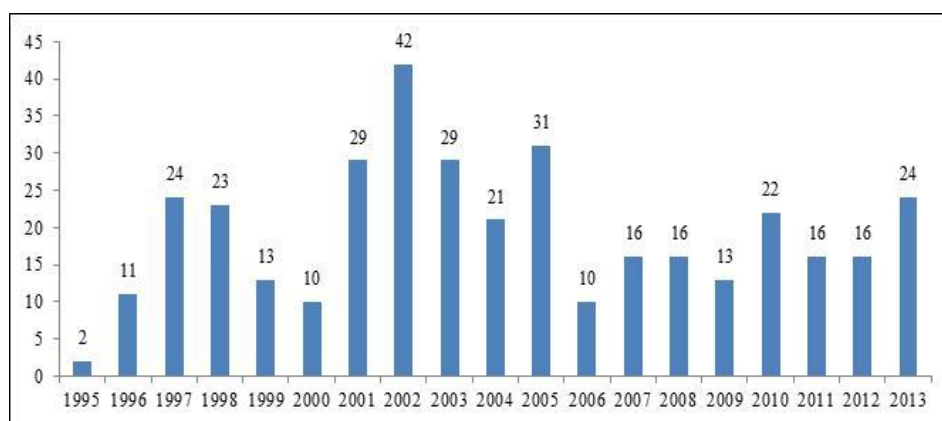
There is no doubt that the SPS and TBT Agreements introduced measures with transparent mechanism for their implementation, set up clear dispute settlement procedures and indeed provided a solid base for international harmonization of national food safety and food quality measures and regulations. It is also true that all along, particular situations and problems of developing countries and their needs for technical and financial assistance have been taken into consideration.

However, at the same time, food safety and food quality standards have been significantly strengthened and increased, which has become a source of great concern among many developing countries.⁶ From their point of view, SPS and TBT measures and regulations are perceived as a barrier to the continued success of their exports, especially regarding the export of high-value agro-food products. In reality, many developing countries are still lacking technical, administrative and scientific capacities needed for compliance with emerging requirements, or they

⁶ Hillman, J.S.: *Non-Tariff Agricultural Trade Barriers Revisited*, In *Understanding Technical Barriers to Agricultural Trade*, proceedings of a conference of the International Agricultural Trade Research Consortium (IATRC). Edited by D. Orden and D. Roberts. St. Paul, MN: IATRC, 2007 p.76.

fear that standards can be applied in a discriminatory or protectionist manner.⁷ In fact, standards and regulations in general, and especially sanitary and phytosanitary measures, involve a mix of protection and protectionist objectives which is very complex to disentangle.⁸ Thus, from developing countries prospective, SPS and TBT Agreement are hindering, rather than encouraging their access to export markets for some agro-food products and in practice, they are perceived as equivalent to a tariff barriers. Although the evidence for this perception are mostly of empirical nature and based on case studies, it is clear that in the context of international trade, food safety and agricultural health standards can significantly affect the performance of developing countries with respect to agricultural and food product exports and represents both administrative and financial burden. Indeed, Graph 1 shows that despite all efforts, there are many trade issues in international trade with food and agricultural products. Altogether, 368 specific trade concerns were raised in the 19 years between 1995 and the end of 2013. Graph 1. shows the number of new concerns raised each year; 24 new concerns were raised in 2013.

Graph 1: Number of New Issues Raised in WTO in the period 1995-2013



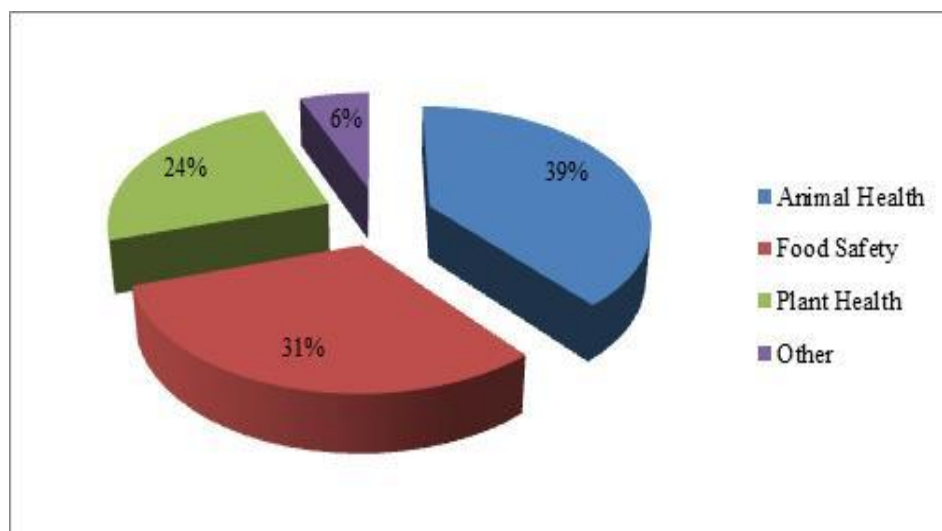
Source: WTO-Committee on Sanitary and Phytosanitary Measures, document G/SPS/GEN/204/Rev.14 .

⁷ Lacovone Leonardo: *Analysis and Impact of Sanitary and Phytosanitary Measures*, University of Sussex, 2003, p.43.

⁸ Roberts Donna: *Preliminary Assessment of the Effects of the WTO Agreement on Sanitary and Phytosanitary Trade Regulations*. Journal of International Economic Law 1(3), 2001, pp.377-405.

Graph 2. categorizes the trade concerns raised over the 19 years into food safety, animal or plant health issues. Overall, 31% of trade concerns relate to food safety concerns, 24% relate to plant health, and 6% concern other issues such as certification requirements, control or inspection procedures. 39% of concerns raised relate to animal health and zoonoses.

Graph 2. Trade Concerns by Subject in the period 1995-2013

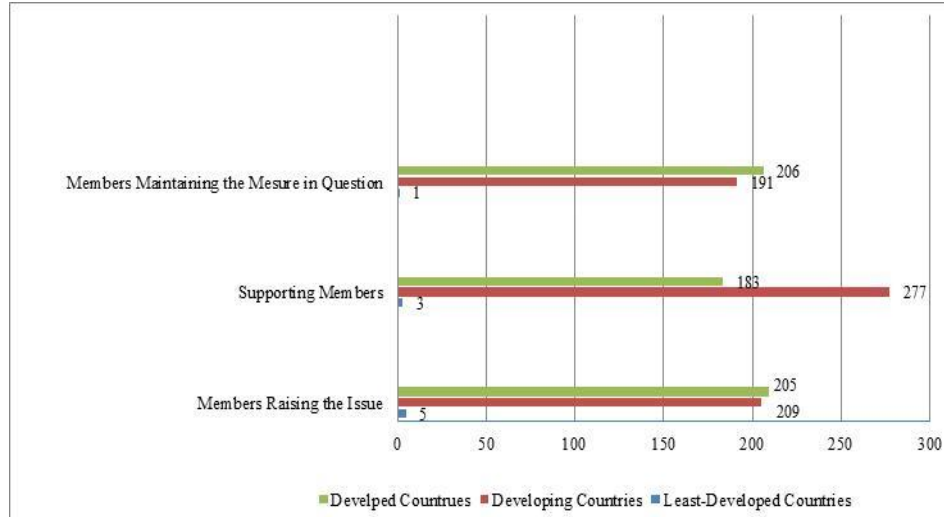


Source: WTO-Committee on Sanitary and Phytosanitary Measures, document G/SPS/GEN/204/Rev.14

Major impacts upon international trade with agro-food products are result to the absence of consensus on the importance of individual measures, followed by the absence of reliable studies of their secondary effects.⁹ Within the WTO, the debate over implementation of individual measures is continuous and quite live. Developing countries are participating actively under this agenda item in the SPS Committee meetings.

⁹ Henson Spencer and Jose Blandon: *The Impact of Food Safety Standards on an Export-Oriented Supply Chain: Case of the Horticultural Sector in Guatemala*; University of Guelph, 2009, pp.17-21.

Graph 3. Participation by WTO Members in the period 1995-2013



Source: WTO-Committee on Sanitary and Phytosanitary Measures, document G/SPS/GEN/204/Rev.14 .

Graph 3. indicates that over the 19 years, developing country Members have raised 205 trade concerns (on many occasions more than one Member has raised, supported or maintained an issue) compared to 219 raised by developed country Members and five raised by least-developed country Members. A developing country Member has supported another Member raising an issue in 277 cases, compared to 183 for developed country Members and three for least-developed country Members. In 206 cases, the measure at issue was maintained by a developed country Member, and in 191 cases it was maintained by a developing country Member. One trade concern regarding measures maintained by a least-developed country Member has been raised.

Most commonly used instruments that cause impact of food quality and safety standards on agro-food export from developing countries are full or partial import bans and request for certain technical specifications (for example product and process standards). Although SPS Agreement calls for technical and financial help to developing countries, as food safety and agricultural health standards proliferate, capacity requirements are increasing over time, so provided external assistance is insufficient to meet remaining and new, even more stringent

requirements.¹⁰ Furthermore, having on mind the overall level of economic development, provided technical assistance often is insufficient to resolve the fundamental, current problems present in developing countries.¹¹

New food safety standards in developed countries are defining the expectations of consumers and many developing countries simply don't have necessary legal and industry structures, or available technical, scientific, administrative and financial resources to comply with emerging requirements. Together with the level of tolerance which is usually quite lower in developed countries, this reinforce the doubt for discrimination against imports in the application of food safety and agricultural health controls and raise the question if suppliers from developing countries must comply with higher requirements than those from developed countries.

The length of time allowed between the notification and implementation of SPS requirements and the level of technical assistance provided by developed countries are also considered to be problems. This suggests that the concerns of developing countries about the operation of the SPS Agreement are closely related to the actions of developed countries in setting and managing SPS measures.¹²

Finally, it has to be noted that achievement and sustained implementation of food standardization is a long and costly process. The compliance cost with SPS-related obligations on some developing countries can require a lion share of total governmental development budgets.

¹⁰ Rios Gonzalo, K.: *Technical assistance needs of developing countries and mechanisms to provide technical assistance*. Paperpresented at the conference International Food Trade Beyond 2000: Science-Based Decisions, Harmonization, Equivalence and Mutual Recognition, Melbourne, September, 1999, p.62.

¹¹ Greenhalgh Peter: *Trade Issues Background Paper: Sanitary and Phytosanitary (SPS) Measures and Technical Barriers to Trade (TBT)*; FAO, July, 2004, p. 48.

¹² Henson, S. J., Loader, R. J., Swinbank, A., Bredahl, M., & Lux, N.: *Impact of sanitary and phytosanitary measures on developing countries*. Reading: Department of Agricultural and Food Economics, The University of Reading, 2000, p.51.

Conclusions

Whether regulated or not with multilateral trade agreements, food quality and safety standards and regulations are affecting trade patterns and have significant impact on exporters ability to enter new international markets. Many developing countries face various problems associated with meeting SPS/TBT compliance. This not only applies to their agro-food sector but also to a number of other export sectors. According to latest WTO-FAO predictions, developing countries will provide the main source of growth for world agricultural production, consumption and trade. From this perspective, greater understanding of the impact of SPS/TBT requirements on developing countries is of immanent importance. Thus, addressing problems they face, and supporting their efforts to change institutional structures relating to SPS and TBT standard setting are a definite need.

In order to overcome difficulties, both on international and national level, concrete actions need to be taken to further promote the participation of developing countries in international trade with agricultural and food products. Those actions should include:

- Raising the level of awarness in developing countries on the role and impacting SPS and TBT measures/regulations on international trade. This will change the perspective from „standards as a barriers” to „standards as a catalyst” and contribute to modernization of agro-food export from developing countries.
- Prolonging the period for compliance for developing countries. Longer period will enable developing countries to atcheve new standards and manage the needed costs of compliance
- Expanding harmonization of SPS requirements and developing international food safety, animal and plant health standards for the largest number of food and agricultural products traded in world markets. This will facilitate international trade and will minimize technical barriers.
- Incresing technical assistance. This will provide developing countries with the information, training and resources needed to comply with new standards and regulations.
- Enabling developing countries to be more involved in standard setting so they can participate more fully in world trade. This will increase awareness of developed countries about ability of

developing countries to comply with SPS/TBT measures and the impact they might have on their export performance.

- Providing legal assistance in dispute settlement over agricultural standards. This will help developing countries to overcome special difficulties and higher costs in demonstrating compliance with import regulations.

In much of the ongoing debate about increased levels of food quality and safety standards through globalization, there is a growing concern on whether or not the benefits would be equally shared by all. Fair trade and access to markets are still the crucial unsolved issues. Regarding the export of agricultural and food products from developing countries, no doubt that improved transparency of SPS/TBT agreements; greater harmonisation of SPS/TBT standards; improved mechanisms for the provision of greater legal and technical assistance, including legal assistance to participate in dispute settlement; and longer periods in which to achieve compliance would certainly be more than welcome and beneficial.

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Original scientific paper

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THE CONTRIBUTION OF SCRUM IN MANAGING SUCCESSFUL SOFTWARE DEVELOPMENT PROJECTS

Abstract

The goal of this paper is to acknowledge the contribution of Scrum as one of the agile methods, which helps in overcoming the most common reasons for project failure in software projects, and the benefits from this concept. This paper proposes how the success rate in these projects can be improved by adopting Scrum and analyses the benefits and results of such undertaking. Finally, this paper presents an empirical research on project management in software development in Macedonia, and the management of these projects in regards to Scrum.

Keywords: Software projects; Project management; Scrum; Agile Methods; Macedonia.

JEL classification: M15

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Introduction

The invisible engine today that moves the economy and the whole society at large is software and the innovations in the information technology (IT), which change the way people work and live. The advancement in the information technology, the numerous innovations, programs, software tools etc. lead to many projects in the IT and software area. However, although project management is the answer that many companies have adopted today as a fast and efficient management practice, there is still a high rate of unsuccessful and challenged software projects (CHAOS Research, 2012) that demand new possibilities, new methodologies and frameworks for improving project management as a practice in this area.

Agile methods have been particularly popular for software projects. This increasing interest is believed to be due to the contribution of agile methods as powerful development alternative, supposedly able to avoid project problems such as low productivity schedule delays, high costs, lack of people's motivation and other problems, which are still significant problems in the software engineering field (Dyba and Dingsoy, 2008).

This paper aims at providing answers to the following working hypotheses and their respective research questions:

WH1: The application of Scrum as project management framework, contributes towards increased number of successful software projects;

RQ1.1: How does Scrum contribute towards increased number of successful software projects?

RQ1.2: What is the adoption of Scrum like in comparison to other project management frameworks and methodologies?

WH2: The companies in Macedonia use project management methodologies in managing their software projects;

RQ2.1: What are the most common project management methods for managing software projects in Macedonia?

RQ2.2: Is Scrum used among IT companies in Macedonia and is this project management framework perceived as suitable for managing software projects?

RQ2.3: Could Scrum be considered to be a driver of success for software projects?

The paper emphasises the outcome of both theoretical and empirical research and offers conclusion points for further research analyses in this topic.

In this paper we use the following research methodology: analysis–synthesis; inductive-deductive method; statistical method; historical method; comparative method; descriptive method; classification method; empirical method; and compilation method.

1. Basics of Project and Project Management

Project activities throughout history have enabled the realization of numerous activities, managing the undertakings in a planned and organized manner. The formal acceptance of project management as a management practice and the development of the methodologies, techniques and tools for planning, managing and controlling projects have enabled true exploitation of the benefits of project management.

The international organizations Project Management Institute, PMI, and International Project Management Association, IPMA, have played major role in the wide acceptance and affirmation of project management, by establishing standards, knowledge, processes, skills, techniques, frameworks, etc. that contribute towards established and organized project management approach.

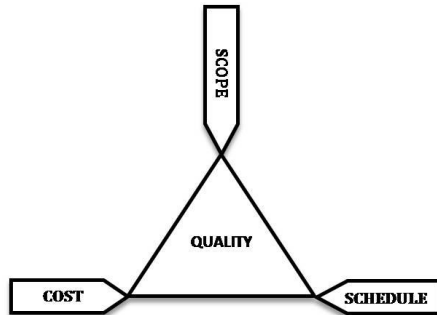
1.1. Defining Project and Project Management

There are numerous definitions in the literature that help in understanding project and project management. A widely accepted and referenced definition is provided from PMI (2013, p.3), which defines the **project** as a “temporary activity, an endeavour, undertaken to create unique product, service or end result”. There are many examples for projects nowadays, such as new product or service development, implementation of new or modification of legacy information systems, building construction, infrastructure etc. On the other hand, PMI (ibid, p.4) defines the **project management** as the “application of knowledge, tools and techniques upon the project activities to realize and achieve the project requirements”.

Projects are *unique*, they are *timely bounded composition of activities* with defined *beginning and end*, well defined *project goal*, and

most often they consist of defined and approved *project budget*. To these regards, a project is bounded by a time constraint, a budget constraint and scope of work constraint, known as project management triangle demonstrated in Figure 1.

Figure 1. Project Management Triangle



Source: Adjusted from Biafore, B. (2011), “*Successful Project Management*”, O Reilly Media, Inc., p.6.

The project management triangle demonstrates which aspects a project needs to address to have successful realization. A successful project is the one that will end in the time frame approved, in the budget approved and will deliver the requirements as specified in the project when approved. Deviation from the project baseline would compromise the project success and depending on the constraints set and the proportion of the deviation, the project could end up in partial success or failure.

1.2. Drivers for Project Management Adoption

The drive and incentive for project management as a management practice on one hand derive from the external pressures and competitive rivalry, and on the other hand from the benefits that this practice brings for managing larger activities. External pressures include forces such as advances in technology and increased customer demand. But a major drive for project management as a worldwide accepted management practice are the numerous benefits that project management brings (Kerzner, 2009).

In this paper we also identify several advantages from an empirical point of view and observe these factors as benefits from

adopting project management: focus and goals' accomplishment, identification of client requirements and delivery of these requirements, increased client satisfaction, time planning and faster time to market new products, services, systems, flexibility and opportunities for development of project plan alternatives, effectiveness and efficiency in managing project activities, increased productivity, support and alignment of project goals with the strategic targets of the companies, delivery of the right products at the right time, realization of activities in an organized, planned and coordinated manner, etc.

2. Success in Software Project Realization

One of the most widely used reports when it comes to project success rate in software related projects is the CHAOS Report. The first reporting of the project success/failure rate dates from 1994 (Standish Group Report, 1995), where the Standish Group was collecting data regarding the project success/failure rate throughout the years (Standish Group Report, The CHAOS Manifesto, 2013). The results from these reports take into consideration approximately 365 companies with total of 8380 software systems under development as projects. The results represent a global view of project statistics with heavier concentration in US and Europe. For each reporting period about 60% of them are US based, 25% are Europe based and the remaining 15% are from other parts of the world. The results from this report consolidate the success/failure rate in software projects in three categories:

- > **Project success** - projects completed on time within the budget approved, containing the functionalities according to specification.
- > **Project challenged** - projects completed, but either beyond the budget approved, or longer than planned and/or not fulfilling some of the functionalities initially specified in the scope of the project.
- > **Project impaired** - projects that were cancelled at some point in time after commencement.

The graphical representation of the software development project success/challenged/impaired rate and the progress from 1994-2012 is demonstrated in Table 1.

Table 1: Software Project Success Rate Progress 1994-2012 (Standish Group)

	1994	1998	2000	2004	2006	2008	2010	2012
Project success	16%	26%	28%	29%	35%	32%	37%	39%
Project challenged	53%	46%	49%	53%	46%	44%	42%	43%
Project impaired	31%	28%	23%	18%	19%	24%	21%	18%

Source: According to information from Eveleens, L., Verhoev C. (2010), "*The Rise and Fall of the CHAOS Report Figures*", IEEE Software, p.31 and The Standish Group, (2013), "*The CHAOS Manifesto 2013*", p.1.

Although many authors have disputed the numbers from the Standish group as too extreme and too high (Glass, 2006), (Jorgensen and Molokken, 2006), (Zvegintzov, 1998) claiming that the interpretation and meaning of the formulation for project challenged and project impaired is not as accurate, this report remains as the one with highest reference when the problem of software project success rate is being considered (IT Cortex, 2002).

The consequences from such failure are implicated in content deficiencies and high financial expenses. Some of the well-known software project failures and the connected consequences from this failure are demonstrated in (Charette R., 2005).

The ten most common problems that cause failure in software projects according to the CHAOS report are listed in Table 2.

Table 2: Reasons for Project Failure

Project impaired factors	% of responses
1) Uncompleted requirements	13.1%
2) Lack of user involvement	12.4%
3) Lack of resources	10.6%
4) Unrealistic expectations	9.9%
5) Lack of executive support	9.3%
6) Changing requirements & specifications	8.7%
7) Lack of planning	8.1%
8) Didn't need it any longer	7.5%
9) Lack of IT management	6.2%
10) Technology illiteracy	4.3%
Other	9.9%

Source: Standish Group Report, (1995), “*CHAOS*”, p.4-5,
[<http://www.projectsmart.co.uk/docs/chaos-report.pdf>] (08.09.2014)

Other papers and reports also confirm and correlate with these factors as root causes for failure in software projects, emphasizing “User requirements”, “Unrealistic customer expectations”, “Insufficient planning”, “Transparent communication” etc. as main reasons upon which the success in software projects depends.

3. The Scrum Framework Concept

The increased complexity of software development projects and the dynamic pace of changing of technologies nowadays, have led to increased demand for flexibility and adaptation in the user requirements as a project progresses. This situation has imposed the need to develop methods that offer flexibility in the planning of software projects and project realization.

Incomplete requirements and alteration of requirements have been recognized as the top problems in software development project

management, and at the same time, a reason for failure. According to research by Brewer and Dittman (2009, p.38) in the software development, 25% to 50% of the requirement in these projects change in the process of development. This has led to development of new methods, frameworks and methodologies that will offer flexibility in project management and agility in both project planning, project execution and project change management. There are several agile project management methodologies, such as Extreme Programming – XP, Agile Modelling, Lean development. However, subject of this paper is analysis of one particular agile project methodology – Scrum, which by itself is the most popular and the most used agile project management framework (Forrester, 2009).

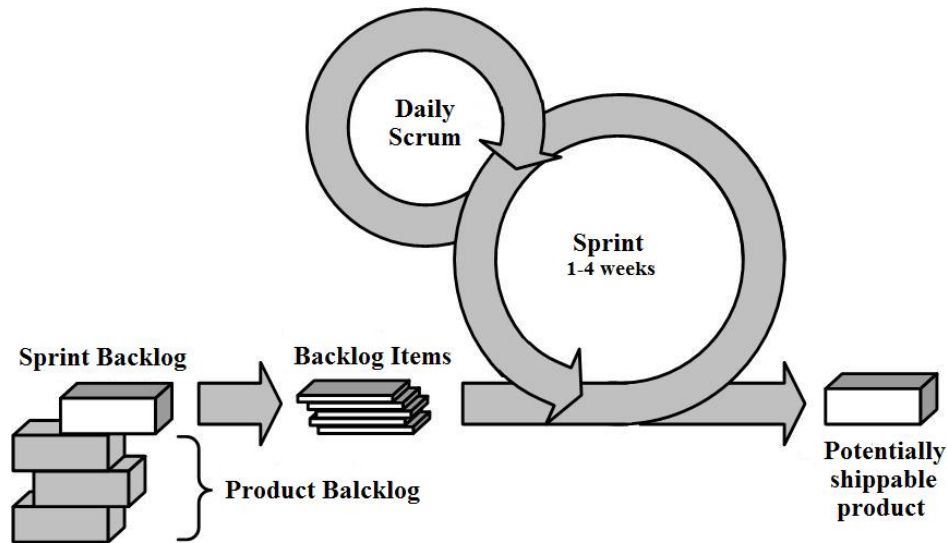
3.1. Scrum Introduction and Development

Scrum has been formally defined as project management framework in 1995 in a workshop on OOPSLA (Object-Oriented Programming, Systems, Languages and Applications) (Schwaber and Sutherland, 1995). In the following years, these authors have continued to develop this method and to contribute to the development and its wide acceptance and affirmation.

Scrum is an iterative framework for managing projects, most common software development projects. The main reason why this framework is suitable for projects with IT background is that it acknowledges and welcomes project flexibility and changes whilst the duration of the project. During the project duration, the clients or users can make adjustment or changes in the requirements, which can be included in later stages of the project, in a following iteration.

The Scrum process in a simplified presentation is depicted in Figure 2.

Figure 2: The Scrum Process



Source: Adjusted from Sutherland J., Schwaber, K. (2011), "*Scrum Papers*"
[http://scruminc.com/tl_files/scrum_inc/documents/ScrumPapers.pdf]
(10.09.2014)

The structure of this framework is based on cyclical circles of work called sprints. These sprints, also known as iterations, are with usual duration of 1-4 weeks and follow one after another, without any breaks and pauses along the way. The sprints are time-bounded and finish on specifically defined date, regardless of whether work under that iteration has been completed and they are never prolonged. At the beginning of every sprint, cross functional team chooses a segment of user requirements from the **product backlog** that has been developed by the **product owner** together with the stakeholders. The product owner is the representative of the stakeholders of that project. The team dedicates itself on working on the chosen segment from the product backlog, known as the **sprint backlog**. The sprint backlog and the set of user requirements it would include is pre-defined during the sprint **planning** on a meeting between the team and product owner. During the sprint, the list of requirements is not a subject to changes. Every day, the team meets for short meetings, known as **daily Scrum meetings** addressing three topics each meeting:

- > What did you do yesterday?
- > What will you do today?
- > Are there any impediments in your way?

This enables daily progress tracking and up-close monitoring and control of the project. The coordination and control of the application of Scrum as a concept within the project is done by a **Scrum Master** that coordinates the Scrum daily meetings and ensures that the methodology is being implemented in the project. At the end of each sprint, the team makes a **sprint review** with the stakeholders and demonstrates what has been done and also receives feedback on matters that the team should focus on in the following sprint. At the end of each sprint, a **sprint retrospective** is also undertaken to evaluate what has been done well and whether there is room for improvement in the following sprint. The sprints go on until the last sprint backlog is implemented, thus fulfilling the whole user requirement list and delivering product backlog. In this manner, this framework offers product development in phases, sprints, enabling adaptability and flexibility that software projects deem as pre-requisite.

To further comprehend Scrum as a project management framework and the suitability of this framework for software projects, we compare Scrum to Waterfall and address areas that distinguish Scrum as appropriate and most fitting project management methodology, specifically for software development projects.

For software projects, the Waterfall methodology pre-assumes that all user requirements are defined in great details in the analysis phase and are not subject to changes during the duration of the project. However, if such changes do occur, which for software projects is quite often, and changes are more practice than exception, the project would result with change of the requests, which dramatically results with increased prices and project cost. Other weak points of the Waterfall framework is its rigidity, its low user involvement as well as the detailed planning in early phases of the project, when the information for the product scope is neither clear nor understood in details. Details of the comparison logic between Waterfall and Scrum are presented in Table 3.

Table 3: Comparison of Scrum and Waterfall Frameworks

	Waterfall	Scrum
Process defined	Mandatory at the beginning of the project	Only in planning and close down phase
Budget and project finish date	Determined and set in project planning phase	Determined during project duration
User involvement	Occasional	During the whole project duration
Flexibility and creativity within the team	Limited	Unlimited during the iterations
Transfer of knowledge within the team	Prior project starts	During the whole project duration
Possibility for success in IT projects	Low	High

Source: Schwaber, K. (1995), "*Scrum Development Process, Advanced Development Methods*", Inc., p.68.

Although the Waterfall framework is widely recognized and used, it is most suitable for projects that have clear goals and requirements that can be set in the very early stages of the project. However, one of the main reasons why software projects fail is the project requirement definition, incomplete requirements, changing requirements and specification as well as lack of user involvement. Therefore, segmented delivery of the project in increments and iterations offering flexibility and possibility for changes proves more convenient and fitting. Supporting this conclusion, the CHAOS Report (Standish Group 2012), demonstrated the contribution of agile project management that includes Scrum against Waterfall for the realization of software projects from 2002 to 2010. The percentage of projects completed as successful is significantly greater, with an agile project management, than the ones using the Waterfall method – 42% successful software projects against 14% with Waterfall.

3.2. Correlating causes of failure in software projects and the contribution of Scrum to bypass this problem

To answer our first research question “How does Scrum contribute towards increased number of successful software projects?”, we correlate the causes of failure in software projects identified in the previous segment, and point out for each one how Scrum contributes in overcoming these problems and how it contributes for successful software project realization.

- 1. Incomplete requirements** – The main idea behind Scrum is the acknowledgement that this concept accepts change of requirements during project duration and management of these changes in upcoming project iterations. The methodology is designed to be flexible all along the project life.
- 2. Lack of user involvement** – User involvement takes great part in Scrum as the users/clients are included in the process during the whole project duration, providing input for User Requirements (UR) and product revision. By using Scrum, a good relationship with the clients is usually developed and also the knowledge of the client about the product/project increases during the time. This relationship sets grounds for stable long term cooperation.
- 3. Lack of resources** – The team working under Scrum are “general specialists”, people with specific field of expertise, however, also with general knowledge from similar areas, thus enabling resource support among the team. A programmer can assist and support a project tester if there is available time allocation on the side of the programmer. The team works in mutual effort to achieve the goal.
- 4. Unrealistic expectations** – In Scrum, the users and the team are in constant communication and there is information spread and progress awareness during the project time. In Scrum, the team size is also small and small teams tend to work more independent and more efficient than the teams in large projects (Rising and Janoff, 2000). In such teams the communication is open, transparent and set on daily basis making it easier for all stakeholders to be up-to-date with the project progress and project delivery.
- 5. Lack of executive support** – Executive support in Scrum concept takes part in several project situations. As such, executive support is included in setting list of prioritization for product backlog, during sprint review and sprint retrospective.

- 6. Changing requirements & specifications** – Iterations in Scrum enable update of product backlog list and inclusion of the modifications and updates in some following sprint. The flexibility of the methodology allows organizations to modify the project and its deliverables at any time, delivering at the end the most appropriate release. In the same time, this methodology offers mechanisms of controlling and improving the project performance, which is essential in the management of changes. Scrum's characteristics make this project management methodology very suitable for software development projects as these projects have many requirements that change rapidly and requirements that are sometimes vague, unclear and not possible to be specific at early stage of the project.
- 7. Lack of planning** – In Scrum, planning phase does not happen only during the project start, but during the whole time of the project. Possibilities for re-planning and adjusting the project baseline are possible to be made after every sprint or iteration.
- 8. Didn't need it any longer** – The risk of terminating the project because of lack of need is mitigated with the Scrum concept, on one hand side as it includes project planning and input regarding the need of the project from all relevant stakeholders, but also on the other hand side as it enables modifications and changes in the requirements that could address the possible need for change in the project.
- 9. Lack of IT Management** – One of the great values in Scrum concept is the self-dedication and empowerment given to the team. Such self-dedication to the tasks in the sprint and daily communication, enables project progress transparency, project tracking and project management, while in the same time avoiding the need for a project manager that will simply dedicate tasks, without the IT knowledge and understanding.
- 10. Technology illiteracy** – The Scrum team (3-9 members) are all IT oriented people whose task is to deliver the user requirements set with mutual cooperation. The team members support each other in the work, share their experience, and undertake tasks that fit his/hers technology knowledge, but can support other areas as well. Furthermore, the team meets daily and shortly discusses impediments on the way allowing other team members to offer their support by suggesting proposal solutions and ideas for improvement.

Taking this in consideration, the Scrum methodology if applied as conceptualized, addresses the needs for software project management and successful software project realization, supporting the first hypothesis of this paper and providing answer to our first research question.

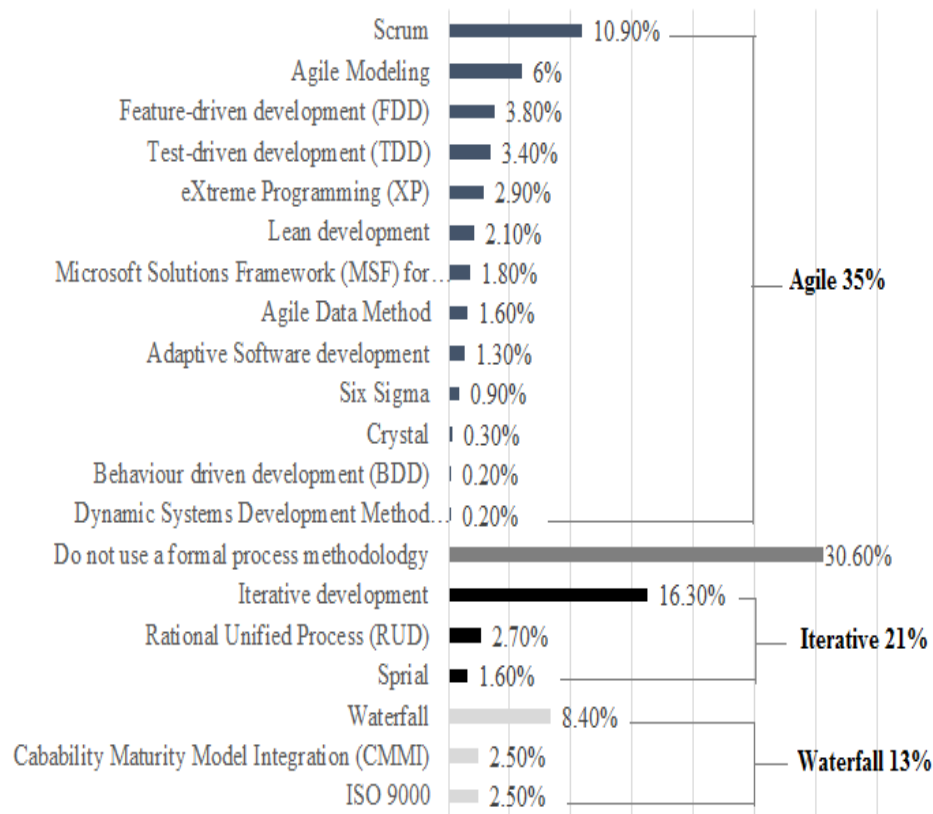
3.3. Adopting Scrum and the Benefits of this Project Management Framework

Scrum has found wide acceptance in well-known and world recognized companies. Google has applied Scrum for developing one of the most profitable software products till now - Google AdWords. Also, the immense project with more than million lines of code, SiriDynix, has been implemented with Scrum. Furthermore, Yahoo! and many other have done various projects under the Scrum Framework (Sutherland and Schwaber, 2011). But at the same time, Scrum has been adopted in many small entrepreneurial companies from where in the first place Scrum originated.

Coming to our second research question “What is the adoption of Scrum like in comparison to other project management frameworks and methodologies?”, we use the research study conducted in 2009 by Forrester and D-r. Dobb, which included 1298 IT professionals.

As the graphic in Figure 3 demonstrates, Scrum is the method most widely used from agile project management methodologies with 10.9% adoption. Also, agile methodologies have the widest spread adoption of 35% compared to other project management concepts and frameworks, like iterative and waterfall. Furthermore, 30.60% of the respondents do not use a formal process methodology which leads to lack of planning, lack of control points and monitoring, that are essential for project management way of work in meeting the time, budget and scope of work constraints. Thus far, as the research results validate, we can confirm and accept our first hypothesis of this paper in which Scrum if applied, leads to improved IT project management and ultimately to an increased number of IT Project successes.

Figure 3: Agile Adoption Compared to other Methodologies



Source: Forrester, (2009), Dr.Dobb's Global Developer Technographics Survey, [http://www.softwareconsortium.com/common-sense-agility.html] (15.09.2014)

4. Software Project Management in the Republic of Macedonia

Several papers discuss the usage of the agile software development methodology in the Macedonian companies (Dalipi et al., 2013; Stankovik et al., 2013). However, the most comprehensive study regarding the common project management methodologies and how they are transferred to project success, as well as the presence of Scrum in the Macedonian IT companies, was presented in a research by Stojkovska (2013).

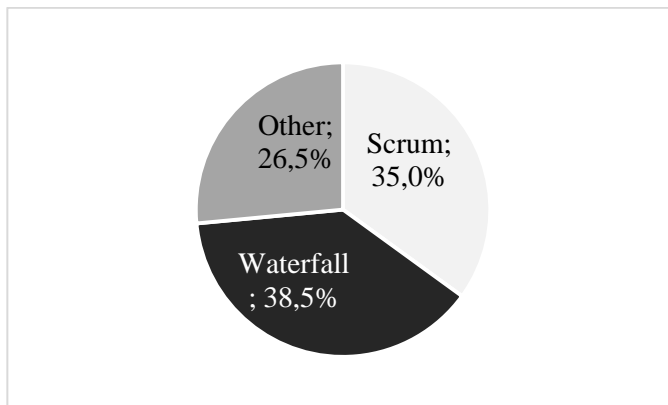
The survey itself was conducted among 63 IT companies in Macedonia out of which 31 responded to the survey. The respondents were partially IT project managers (25 respondents) and partially team

members/programmers (20 respondents). Following the principle in this paper, we firstly identified the success rate of the software projects from the sample in the questionnaire. In this regard, 56 % of the projects were successful projects (project success), 44% were projects that were completed, but either beyond the budget approved, or longer than planned and/or not fulfilling some of the functionalities initially specified in the scope of the project (project challenged), and no project was categorized as project impaired.

In regards to usage of the project management frameworks for software development, the dispersion of the results shows that 76% of the companies use some project management methodology. Also, out of the 56% of the projects realized with project success, 79% use some project management methodology and out of 44% of the project realized with partial success, 64% use some project management methodology, which speaks positively in regards the correlation of project management approach used and project success endured.

From the companies that use project management framework, the dispersion of usage of methodologies is shown in Figure 4. As it can be seen, waterfall is still the most widely used methodology for software development with 38.5%, followed by Scrum with 35% and other methodologies with 26.5%.

Figure 4: Project Management Frameworks for Software Development



Source: Stojkovska Nikcevska, S. (2013), *"The Influence of the Software Development Methodologies on the Efficiency of the IT projects"*, p.101-108.

We can confirm that Scrum is used as a project management framework among the IT companies in Macedonia. However, many companies still use the waterfall method, which is in some respect an obsolete methodology for software project management. However, according to the survey, 19% of the respondents believe that agile methods are more convenient for software development, while only 6% of the respondents prefer the waterfall method in software development. The majority of the respondents think that the type of the project determines the method. According to the opinion of the sample in question, 70% of the respondents have answered that the involvement of project management framework affects positively the project success and is essential contributor to this result whereas 15% believe that it complicates the process and way of work.

According to the results in the survey presented in Stojkovska (2013), we can confirm our second hypothesis in this paper and conclude that it is a common practice for companies in Macedonia to use project management methodologies in managing their software projects as 76% have positively confirmed that they use project management framework in the software project management they undertake. In regards of the research questions RQ2.1 “What are the most common project management methods for managing software projects in Macedonia” both Waterfall and Scrum are used and applied for software development projects, Scrum with 35% of participation, but mostly the answer is that it depends of the project undertaken. In that manner we can confirm our RQ2.2 “Is Scrum used among the IT companies in Macedonia and is this project management framework perceived as suitable for managing software projects?” as the results confirm that Scrum is used among the IT companies in Macedonia as project management methodology. Furthermore, we can also relate this methodology as suitable for software development projects because in this survey agile methodologies were found more convenient for software development than the Waterfall method. Finally, responding to our RQ2.3 “Can Scrum be correlated as a driver of success in IT projects?” we have also identified a positive correlation between companies that have results of project success and that they use project management framework among which Scrum and Agile methods have been proclaimed as more convenient for software development undertakings.

Conclusion

The goal of this research was to acknowledge if and how Scrum as a framework for managing software projects influences improving project success rate. For this reason, we have analyzed the concept of Scrum. We have also correlated the reasons for project failure with how Scrum contributes in their overpowering, which helps support the hypothesis set in this paper that the application of Scrum leads to successful project realization and improvement of the project success rate. Our second hypothesis and research is focused on software development projects in Macedonia. We have looked into the success/failure rate of these projects and the relevance of the project management methodologies and Scrum regarding project successes. According to the survey of Stojkovska (2013) we can conclude that most of the companies use some project management methodology (76% have responded affirmative). In this regard, Scrum (35% have responded that they use Scrum) together with the Waterfall method (38.5% have responded that they use Waterfall) is among the methodologies that are used most widely in this area in the sample taken into consideration. Scrum and the agile methods have been recognized as most suitable for software development projects, due to the flexibility and responsiveness it employs.

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**SOME THEORETICAL ASPECTS OF THE CORPORATE
SOCIAL RESPONSIBILITY INFLUENCE ON THE BUSINESS
FINANCIAL PERFORMANCES**

Abstract

The main aim of this paper is to present and emphasize the corporate social responsibility and its influence on the business financial performances. Thereby, brief historical review on the concept of CSR will be initially made. It is a relatively new concept that is insufficiently researched. Therefore, there are certain dilemmas regarding the essence, the idea, the definition, as well as the elements that the same concept includes. However, it is an indisputable fact that the scientific and professional public pays an increasing attention to the CSR.

Increased pressure by different social groups is one of the most important motives (reasons) that the companies are considering the interaction between their operations within the society. These social groups are becoming stronger, creating a relatively complex environment. At the same time, they make pressure to the companies in order to behave responsibly and to create a social climate in which the

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expectations from some companies become high. In this sense, it should not be neglect the actual trends in the countries for adoption legislation in this area, which inaugurates the obligation for the companies to adhere and to fulfill certain commitments to the society and the environment.

As we already stressed, the emphasis of this paper will be given to the CSR and its influence on the business financial performances. For this purpose, different aspects of the CSR will be reviewed, including the reversible process of influence on the business financial performances over the liability to the society. The processing and analysis of some practical examples will aim to show and at the same time determine the interaction between these two categories, giving an illustrative character to this paper.

We hope that on this way we would be able to give a modest contribution to the clarification of certain aspects related with the subject matter, simultaneously expressing our expectation that this paper will be an incentive for further research in this specific area.

Key words: corporate social responsibility, financial performances, business, company, society.

JEL classification: M14

Introduction

The corporate social responsibility concept is a relatively new concept that is not sufficiently researched. Therefore, there are certain dilemmas regarding the essence, the idea, the definition, as well as the elements that the same concept includes itself. However, despite the dilemmas, there is no doubt that the scientific and professional public pay an increasing attention to the CSR in both the theory and practice.

Increased pressure by different interest social groups is one of the most important motives (reasons) that companies are increasingly considering the interaction between their operations and society. These social groups are growing in number and becoming stronger, creating a relatively complex environment. At the same time, they exert increased pressure on the companies to behave responsibly and to create a social climate in which the expectations from some companies become high. A large number of states have also forced the business by means of laws

and various formal regulations to accomplish certain obligations towards society and environment.

The main topic of this paper is the corporate social responsibility and its (mutual) influence on business financial performances. For this purpose, the paper reviews a number of aspects of the corporate social responsibility, including the reversible process of influence on the business financial performances over the liability to the society. The processing and analysis of some practical examples are intended to show and at the same time, to determine the interaction between these two categories.

1. The notion and concept of corporate social responsibility

The concept of corporate social responsibility is permanently evolving. Despite the general demand of the public for increased profitability of the business subjects, seen chronologically, since the mid-90es the organizational systems are oriented to long-term operations based on improved economic stability, employment framework, governing standards, social welfare and standards for protection of the environment.

According to the European Commission, *the Social responsibility* is “a concept through which the companies willingly integrate their concerns for the community and the environment in their business activities and in their mutual connection with other stakeholders”⁵.

According to the *Business for Social Responsibility* (BSR), the corporate social responsibility is defined as “an achievement of commercial success in manners that satisfy the ethical values and respect people, communities and environment.”⁶ Taking into consideration the dimension of the corporate social responsibility practices to act over and above the very following of the law is the determination of CSR as “actions that occur in order to continue particular societal good, beyond the company’s interest and what is required by law.”⁷

⁵ Commission Green Paper (2001) “Promoting a European framework for CSR”. COM (2001)366, Final.

⁶ <http://www.bsr.org/> Accessed on 15 th of December 2011.

⁷ McWilliams, A. and D. Siegel, “Corporate Social Responsibility: Correlation or Misspecification?”, *Strategic Management Journal*, 21, (2000), p.603-617.

The Social responsibility is seen as a comprehensive set of policies, practices and programs integrated in the business operations, supply chain and the processes of decision making within the company and they usually include issues related to the business ethics, the investments in the community, the care for the environment, the governing, the human rights at both the market and the workplace. The concept is permanently upgraded. In that course, the Lisbon Strategy pursuing to build friendly business environment sees CSR of the business subjects as the best win-win scenario that simultaneously brings higher productivity and social benefit (2009).

The most covered framework for its definition in the research approach is “Triple bottomline“, that reflects the organizational performance in which the social, ecological and economic issues are in mutual interplay. The purpose of “Triple bottomline” approach is to provide social performance that is socially responsible, ecologically acceptable and economically applicative⁸. The research of the concept has identified two key drivers of the development and promotion of the platform for CSR, that is, the economic aspects and the altruistic approach. The companies differ by the way of accomplishing their social responsibility depending on the influence of a number of factors such as the size of the company, the activity of the company, its organizational and business culture, the requirements and the pressures of the stakeholders, as well as the historical progress of the company in the application of the social responsibility.

Some companies are directed toward one particular area considered to be the most important for them or where they have the biggest influence or weakness (for example, the human rights or the environment). Other companies are aimed at integrating the social responsibility in all aspects of their operation. However, if we want to have successful application of social responsibility, it is necessary to be integral part of the corporate values and strategic planning, the specific objectives and the basic competences of the company, and both the management and the employees to be devoted to it. It includes accurate formulation of the mission and the key values of the company, application of the ethical code, application of the corporate management code, risk analysis, providing training in ethical behavior, establishing measures and preparing reports on the social, ethical and ecological

⁸ <http://www.simplycsr.co.uk/> (Accessed on 21st of January 2012).

aspects of the business⁹.

The creation of the socially responsible policies is a subject matter of the profit. They move between the philanthropy and the legal framework, addressing the way in which the companies achieve their economic, social and ecological influence, as well as the connection with the stakeholders in all spheres of their operation. The strategic approach in creation of the socially responsible policies has developmental dimension, it leads to long-term solution of the social problems and their origin, addressing their reasons as well. It develops the human social dimension of the business subjects and creates prerequisites for equal possibilities for all. One of the practices most frequently associated to CSR is the corporate philanthropy. The corporative philanthropy, that is, the corporative donation means social investment in the society¹⁰. This investment may be profit and/or resource related both to the internal and the external stakeholders¹¹.

The improvement of the social community concerns the programs and the measures that the business applies for solution of the problems, that is, for improvement of the life quality of the social community. The most frequent activities conducted by the business in that direction are as follows:

- Philanthropic donations: direct non-returnable grants of money, products and services by the business in order to support particular charitable action or to achieve particular social objectives (for example, a single money donation for the hospitals or children deprived of parental care, as well as sponsorships for particular book of social interest or cultural and sports events) (Kotler, Lee 2003, pp.167-171).
- Volunteering for the needs of the social community: the companies support and encourage their employees, business partners, customers of franchises to volunteer for supporting the local charitable organization in achieving the social objectives

⁹ Dentchev, N.A. (2004) "Corporate Social Performance as a Business Strategy", *Journal of Business Ethics*, 55, p.395-410.

¹⁰ Kusenikova, N., "The way to effective support of the community – Guide for corporate philanthropy", Association "Connect", Skopje, 2010. (Кусеникова, Н., "Патот до ефективна поддршка на зедницата Водич за корпоративна филантропија" Здружение Конект, Скопје, 2010).

¹¹ <http://humanresources.about.com/od/businessmanagement/a/csr.htm> (Accessed on 15.March 2012)

(collecting food and donations, draining swamps, cleaning of particular parts of the city, tree planting etc.).

- Promotion of social objectives: providing resources for improvement of the population awareness for the social objective developed by a particular non- profit organization (for example, UNICEF support in collecting contribution for the sick and starving population worldwide).

Support of the social community through marketing companies, which means to set a certain part aside from the incomes of sale of particular product or production line of the company intended for the solution of a particular social problem.

Compound part of the social responsibility is also the activities aimed to the improvement of the environment, which concern the use of the company's resources for solution of the ecological problems. The ecological dimension of the social responsibility also means utilization of the high-end technology which is able to eliminate the company's negative effects on the environment (such as, for example, technologies for waste recycling, use of renewable sources of energy, water and air protection against pollution and alike).

The activities for creation of working environment that improve the quality of the employees' life are directed to investments and efforts for ensuring a workplace that the employees will consider to be a perfect workplace. It includes different training and mentoring programs (that will enable the employees to advance in their career), stimulative rewarding methods (based on their outcomes), continued improvement (which provides promotion on the job), flexible working hours, higher participation in decision making, regulation of the working hours and the allowed overtime work, improvement of the occupational care, providing proper working conditions and alike. There are seven groups of CSR activities defined in the research history of the concept.

Figure 1: Major groups of CSR activities¹²



2. The need for socially responsible operation of corporations

The greatest influence over the interest in the Social responsibility resulted from the strong pressure exerted by particular social groups. It contributed to the strengthening of the companies' awareness for their responsibility toward the society.

In the 1990s the pressure exerted by different social groups (organization for protection of environment, for customer protection, workers' protection etc.) became very strong and created very complex surrounding for each business subject. It is noticeable that those groups and organizations have exerted increased influence over the companies regarding the responsibilities for their business operations and the creation of social climate. Moreover, a large number of countries, especially the developed countries, standardized the minimal business requirements in particular areas of the social responsibility throughout their legislation. Very severe sanctions apply for disobedience and violence of the determined regulations. In many countries of the European Union, for example, we can find rulebooks that oblige the business to provide normal working conditions (respecting the determined working hours and maximum allowed overtime work); to provide equal possibilities for all employees, to protect the human rights of the employees and to prevent discrimination of the employees, as well

¹² Catalogue of CSR Activities: A broad overview. An Ashridge report produced for The Danish Commerce and Companies Agency September 2005.

as to forbid children's labor, to establish fair compensation structure, plans for employee development, as well as to guarantee the employees' freedom to join various trade unions; to encourage and improve the relations with business partners and to respect the agreed obligations; to perform high-end ethical behavior with the suppliers, clients, strategic partners); to contribute to the anticorruption fight etc.

Besides the legal requirements and the pressure exerted by the stakeholders and various interest groups, the owners and the managers become aware that the socially responsible operation provides sustainable competitive advantage which contributes to the following (Kotler, Lee 2003, pp.12-13):

- Strengthening of the corporate image,
- Strengthening of the brand positions,
- Increased sales and market share,
- Drawing talented working force,
- Reducing the operational costs etc.

The corporate image and reputation represent intangible values of a company that affect the sustainable competitive advantage. The socially responsible operation contributes to the strengthening of the position of a particular brand especially when the customers connects it to a particular social objective which the company supports through setting aside a part of the incomes from the sale of a concrete brand, supporting certain humanitarian activities etc. The customers' awareness of their own power focuses the company's attention and requirements on the product safety, wherein they prefer products and services offered by the companies that they believe behave responsibly. At the labor market the companies offering good working conditions, respect the employees' rights, provide possibilities for upgrading and education, are more attractive for the labor force and they more easily provide competent and talented resources as well.

Although it seems financially expensive, however, the socially responsible operation may result in reduction of the costs in a number of ways. The application of the ecological standards, the saving of electric power, water and alike, all these affect the cost reduction. Moreover, the humanitarian actions and socially beneficial programs and measures accompanied by marketing promotion (publications, advertisement etc.) speak in favor of the fact that the company works on its own promotion and free publicity.

3. Economic drivers for corporate social responsibility

On the basis of the experiences of the companies that have adopted the CSR policy or have applied it as a part of their strategies, the expert public has identified a number of ways in which the application of this approach in decision-making improves the financial performances. Drivers cannot be seen individually, but unavoidable is the fact that different companies can have different drivers. Drivers can have different intensity as well, depending on the field of operation (industry – surrounding). The decision on adoption of the CSR practices, their integration in the company's strategy results from the combination of the drivers.

The World Economic Forum and the Business in the Community regarding the voluntary adoption of the corporate social responsibility by the companies worldwide has identified the following most influential economic drivers:

3.1. Hiring, Motivation and Retention of Employees

The recent research point out that the internal employee-oriented CSR practices of the company are significant factor for sustainable development of the companies, especially when we are talking about providing equal approach to the hiring, attraction and retention of the talented and diversified working force¹³. The companies that take care of the balance between the employees' working and private activities, of their professional interests, offering them good working conditions to achieve better performances regarding the quality, as well as a higher level of productivity.

3.2. Learning and Innovation

Investments in learning and innovation are of key importance for long-term survival of any business. The business community uses them as tools to respond the ecological – technological and societal risks and challenges, but at the same time, it uses them as its own attributes in preparation for incorporation of the new business possibilities.

¹³ Ibid.

3.3. Reputation Management/Improvement

Profitability and success of the company partially depend on the image that the clients, suppliers and the wider community have of the company. The incorporated CSR concept in the business strategy of the company provides means for managing and directing the positions and the perceptions of their stakeholders, the building of their trust and enjoying the benefits of the positive relations for the purpose of providing business advantage.

3.4. Risk Profile and Risk Management

CSR practices enable the company to manage the risk more efficiently, to reduce the possible losses, as well as to use the leadership positions as a means for achieving competitive advantage at the economic market.

3.5. Relations with Investors and Access to Capital

The investing community increasingly sees the CSR concept as a long-term risk management and good managing practices. The recent research point out to the fact that the analysts attribute equal importance to the corporate reputation as they attribute to the financial performances¹⁴.

4. Relation between corporate social responsibility and financial performances

Undoubtedly, the profit is one of the most important elements for each business. The profitability is the most important aspect that affects the development and survival of the firm. The expectations of all shareholders are return, that is, fertilization of the invested resources. Most of the researches consider that the increase of the financial operation is the key driving power for the firms to report CSR. However, the process of corporate social reporting is very expensive process. The argument is that the companies, which report investments in CSR

¹⁴ Klassen, R.D. and C.P. McLaughlin, "The impact of environmental management on firm performance", *Management Science*, 42, p.1199-1214.

practices, have increased profit, while other companies face negative effects over their financial performances.

There are many reasons for the companies to report their CSR investments. There are two major parties in the debate. The first is that the companies oblige themselves to report CSR, because they accept to have responsibility toward a large number of stakeholders in the society, not only toward their shareholders. The other party of the debate is the explanation that there is a kind of payoff if the company reports CSR investment. According to Lyon, there are a number of benefits listed, such as better PR, increased recognition of the product, increased motivation of the employees, increased team of working force, better public image of the company, increased long- term profitability. In 2002, KPMG one of the four largest world consulting houses prepared a report indicating that 45% of the 250 largest companies worldwide prepare a Report on the social responsibility, which represents an increase of 35% compared to 1999¹⁵. The connection between the CSR practices of the company and its financial performances is a subject matter of a debate for many years, and there is no final consensus on the correlation between the variables researched through different methodological approaches and models.

4.1. Positive correlation between CSR and financial performances

The positive correlation between the economic performances of the firm and its role in the control of the pollution in the paper industry was elaborated by Spicer (1978). His study has shown that when the control of pollution is higher, the company realizes higher profitability and faces lower systematic risk. It was also indicated that the benefits were short-term.

Anderson and Frankel (1980) using the market value of the firm as a measure for the financial performances have displayed its approach to CSR. They have identified positive correlation between CSR and the market value, which means the degree of investments was higher in the companies that have reported CSR. Such practice has confirmed the existence of the so-called “ethical investors”.

¹⁵ Lyon, D. (2007). An Investigation into the relationship between Corporate Social Responsibility reporting and Financial Performance, Management review.

4.2. Negative correlation between CSR and financial performances

The opposite consideration of the most researchers regarding the influence of CSR over the profitability relates to the influence of the firm's financial performances on the CSR investments, not vice versa. According to Maguire, companies having "spare assets" at their disposal have bigger possibility to invest in both the society and the environment. His consideration that the firm having higher profit is more likely to report CSR investment was shared by Parket and Eilbirt¹⁶.

5. Concluding Remarks

Taking the aforementioned into consideration, one can conclude that there is a large debate and discordance regarding the legitimacy and evaluation what a socially responsible business represents. There are various views and positions over the role of both the entire business, and the individual companies in the society, as well as disagreement whether the profit should be the sole objective of a corporation. The companies having better financial performances have also more resources in their possession, which they invest in the social segments and performances, such as the employees, environment, their surrounding, in other words, in the community as a whole. The financially strong and powerful companies can afford to invest in ways by which they will gain long-term strategic influence, such as, for example, providing services for the community and their employees. Those resources can be strategically connected with their better image in the public and improvement of the relationships with the community for the purposed of attracting more qualified workers.

Socially responsible companies undoubtedly have higher brand image and positive reputation among the customers. At the same time, they have the possibility to attract more established employees and business partners. The companies that adopt CSR are basically more transparent and bear lesser risk of bribery and corruption. They also bear lesser risk of negative social events, which could damage their reputation

¹⁶ Parket. I. R. and Eilbirt, H. "Social Responsibility: The Underlying Factor" Business horizons, p.5-10.

and cost millions for expenses for additional information and advertising campaigns or court proceedings.

There are companies in our country that have exhibited corporate socially responsible behavior, but unfortunately, there is a lack of culture of reporting the corporate social responsibility, which would allow conducting relevant research on the corporate social responsibility and its correlation to the financial performances.

At the end, we would like to express our hope that the increased attention also paid to this concept in Republic of Macedonia would be stimulus for the domestic companies to develop the awareness and the need of the application of CSR standards, which as bottom line (as we determined in this paper) would lead to the improvement of their business performances.

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Original scientific paper

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INDICATORS FOR COMPETITIVENESS IN THE REPUBLIC OF MACEDONIA - ANALYSIS AND CHALLENGES

Abstract

One of the major problems facing the Macedonian economy is competitiveness. Creating a competitive economy is highly prioritized aim of the Government, which includes active engagement of many institutions. Therefore, the main aim of this paper is to assess the condition and the level of competitiveness in the economy using different methodologies, indexes and indicators, and to demonstrate the prospects and ways for its improvement.

In this paper the results indicate the improvement of the condition of the Macedonian economy competitiveness, but at the same time point out the need for its further strengthening. For this purpose, the country needs to take a number of measures and some of them are highlighted in the paper.

Key words: competitiveness of the economy, condition, indicators, export, opportunities and prospects.

JEL classification: E60, F10

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Introduction

Competitiveness is a driving factor of the growing trends in the world economy. It shows the ability of national economies to compete with the competition on the foreign markets, as well as integrate into global trade and financial flows.

Development and globalization of the world market permanently impose on all countries larger demands and constant changes, especially in the improvement of competitiveness. In the contemporary globalized economic conditions, increasing competitiveness is crucial for the development strategies of all countries, including Republic of Macedonia. Competitive economy enables expansion of exports, high economic growth and development and social well-being, expressed by increasing employment and living standards. But competitiveness is very complex and dynamic phenomenon and it is not possible to build it and promote it from only one aspect. Therefore, it is necessary to develop competitive advantages on all levels – for certain products as well as economic entities, economic industries and the national economy as a whole.

Given the fact that the category of international competitiveness is complex and comprehensive, the process of its measurement and analysis is also very complex. The level of competitiveness of the Macedonian economy can be assessed by application of different methodologies and indicators. Some of the important indicators of competitiveness, which are analyzed in the paper, are: the index of the World Economic Forum (such as Global Competitiveness Index and Europe 2020 Competitiveness Index), the index of the European Bank for Reconstruction and Development, and Doing Business Index of the World Bank. For a more comprehensive assessment of the economy's competitiveness in this paper, some indicators of export competitiveness are also determined.

Increasing competitiveness is crucial for the development of Republic of Macedonia. Perceptions on development opportunities show that promoting competition is a major prerequisite for efficient management, increased development and rising living standards of the population. Hence, this paper is dedicated to research the level, the real opportunities and the ways to intensively increase the competition in the country. Moreover, the analysis indicates the key conditions, factors,

policies and incentives to increase the competitiveness and the quality and volume of exports.

1. Condition and level of competition in the Republic of Macedonia

The situation in the competitiveness of the Macedonian economy is best seen through the data in the reports of the World Economic Forum, reports of Doing Business by the World Bank, the EBRD Transition indicators and other reputable reports. In general, all these institutions are engaged in research of the competitiveness level of countries based on the analyses of economic systems, international relations, role of the state, the institutional framework and regulation of business activities. The essence of the ranking of national economy competitiveness and its performance relative to other countries is to identify potential institutional and market failures and weaknesses in the economic policy, which could endanger the future of economic growth, in order to be overcome in the future. The full picture of competitiveness of the Macedonian economy is obtained by further analysis of indicators of export competitiveness.

1.1. Doing Business Report of the World Bank

One of the publication that deals with the theme of competition in a number of countries, including the Republic of Macedonia, is The ranking of Doing Business, published by the World Bank. Economies are ranked by ease of doing business in/with them. If their position is higher, they are more favorable to business, and thus more competitive.

Macedonia is a leader in the region for economic reforms and for the conditions for doing business, which indicates the capacity of the Republic of Macedonia to implement reforms and willingness to establish a fully functioning market economy, capable of withstanding competitive pressure and achieving real convergence with EU member states. Another proof of this is the latest World Bank report that placed the country on the 30th place (out of 189 countries) in the world in 2015, ranking which is improved by one position. In the latest report of Doing Business, Macedonia has progressed in 7 of 10 analyzed areas, and in 3 of 10 areas has improved its ranking. The best evaluated are the

procedures for starting a business – 3rd in the world, and tax policies - 7th in the world; and the worst ones are in the dealing with construction permits - 89th, and getting electricity - 88th in the world.³

Despite the results achieved in the previous period, the country must continue to implement additional measures and activities in order to further improve the business climate in the country, which are expected to contribute to strengthening of the competitiveness of the Macedonian economy.

1.2. Competitiveness expressed through the Global Competitiveness Index (GCI) and its components

The Global Competitiveness Index published in the Global Competitiveness Report by the World Economic Forum (WEF) most explicitly documented the progress in the competitiveness of Republic of Macedonia in the last period.

Since 2007, Macedonia has been in the group of countries which, according to the competitiveness of their economies, are in the second stage of development, where the development is driven by factors that increase production efficiency. At this stage, the competitiveness increases with education and training, goods market efficiency, well-functioning labor market, sophisticated financial markets, the ability to place the production of large domestic or foreign market, and the ability to utilize the benefits of the latest technology. Therefore, factors that increase efficiency have the greatest impact in the calculation of the Global Competitiveness Index for Macedonia. Hence, it is essential for the country to have good performance in the five pillars of the sub-index Efficiency enhancers.

³ <http://www.doingbusiness.org/data/exploreeconomies/macedonia-fyr>

Table 1: Global Competitiveness Index (GCI) and its components in the Republic of Macedonia

	Republic of Macedonia
GCI 2014–2015 (of 144)	63
GCI 2013–2014 (of 148)	73
GCI 2012–2013 (of 144)	80
GCI 2011–2012 (of 142)	79
Basic requirements (60.0%)	64
Institutions	45
Infrastructure	82
Macroeconomic environment	55
Health and primary education	78
Efficiency enhancers (35.0%)	69
Higher education and training	71
Goods market efficiency	38
Labor market efficiency	71
Financial market development	41
Technological readiness	62
Market size	108
Innovation and sophistication factors (5.0%)	76
Business sophistication	89
Innovation	68

Source: Created by the author based on data from The Global Competitiveness Report 2014-2015, World Economic Forum, 2014.

In the second stage of development, Republic of Macedonia is together with Albania, Romania, Bulgaria, Bosnia and Herzegovina, Montenegro and Serbia, while Croatia, Latvia, Lithuania, Poland have already transitioned to Phase 3 and GDP per capita over 9,000 USD. Hence, in order for Republic of Macedonia to pass in the phase of

transition from stage 2 to stage 3, it is necessary to double GDP per capita, which in 2013 was US \$ 4,944.⁴

In the region of Southeast Europe, Macedonia keeps the highest position in the rankings of the Global Competitiveness Index (GCI) for 2014, but in the previous two years it took the second place, right after Montenegro, and before Croatia. This confirms its relatively of good positioning within the region, which is confirmed by the fact that the value of GCI for Macedonia in 2014 improved for 10 places and now it ranks on 63rd place (out of 144 countries) compared to the 73rd place (out of 148 countries) in 2013.⁵

Although competition is measured with 12 pillars, these pillars i.e. factors are not independent of each other, but they have inevitable interaction. For e.g. innovation (pillar 12) will not be possible unless there are strong institutions (Pillar 1) with credibility, which will guarantee the right to intellectual property, and these innovations are generally impossible without a well-educated labor force (Pillar 5) and without the cooperation of universities, industry and investments in research and development.

In the *sub-index basic requirements*, Macedonia is ranked on the 64th place (Table 1). Within this sub-index, Macedonia is has the worst ranking in the infrastructure (82nd place), and the best in the institutions (45th place). The biggest progress has happened in **institutions**, as the strongest competitive advantage for 2014 was achieved in: strengthening investor protection, unburdening of government regulation, and transparency of government policymaking. However, in spite of significant progress achieved in the institutional structure, in the future it is necessary to continue with the improvement of: efficiency of the legal framework in challenging regulations, judicial independence and efficiency of corporate boards.

Macroeconomic stability is the next competitive advantage of Macedonia, after the **institutions**. The long history of stable exchange rate and low inflation created an environment in which economic agents have stable expectations. It creates a favorable environment for businesses and investors. But in the future, economic policy makers need to improve the situation in the politics of the budget deficit, which is the worst rating category within this sub-index for 2014.

⁴ The Global Competitiveness Report 2014-2015, World Economic Forum, 2014.

⁵ Ibidem.

Infrastructure should be improved especially in the area of: available airline seats km/week, quality of port infrastructure and quality of roads. The situation is slightly better in quality of air transport infrastructure, fixed telephone lines and quality of electricity supply. Good infrastructure is the basis for rapid growth and development, better competitiveness of the economy, and faster flow of people, goods and passengers. For this purpose, the realization of capital infrastructure projects should be intensified, which will contribute to increasing in the competitiveness of the national economy.

Since Macedonia is in the stage of development which is managed by factors that increase efficiency, the elements for *enhancing efficiency* are the most important ones for the country's competitiveness. In this sub-index, Macedonia is ranked on the 69th place (Table 1). In this context, Macedonia shows shortcomings in: market size, efficiency of the labor market, higher education, training and technological readiness, and its advantages are noted in the efficiency of the goods market (38th place) and financial market development (41st place).

The lags in the field of **higher education and training** are especially apparent in the availability of research and training services, secondary education enrollment (gross), and quality of management schools. **Goods markets are efficient** in terms of total tax rate and the time required to start a business. The situation would be far better if results that are achieved in prevalence of foreign ownership and the sophistication of the buyers are improved. In the sub-category **labor market efficiency**, improvement was observed in pay and productivity, flexibility of wage determination, effect of taxation on incentives to work and hiring and firing practices. The poor ranking of this sub-index is a result of the low level of participation of women in the labor force, low country's capacity to retain talents and to attract talents and low level of reliance on professional management.

The performance of the **financial markets** has improved by far as a result of good values achieved in the area of legal rights. But in the future, the availability of financial services and financing through local equity market should be improved. Best achievements in **technological readiness** can be noticed in the number of individuals using Internet and fixed broadband Internet subscriptions. Within this category, the country has seen worse results for FDI and technology transfer and firm-level technology absorption. These poor results have been also present in the

years before. Therefore, Macedonia should immediately employ measures to improve the situation in these areas.

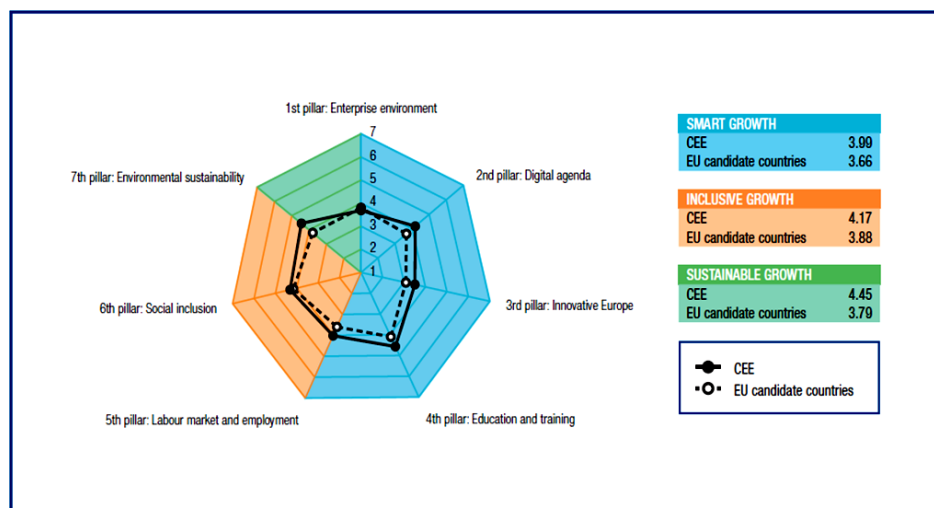
In the *subindex of innovation and business sophistication*, Macedonia ranks on the 76th place. In business sophistication, Macedonia is ranked on the 89th place, and innovation on the 68th place (Table 1). **Business sophistication** takes into account the quality of the overall business networks in the country, and the quality of the activities and strategies of individual companies. In view of the status of business sophistication in Macedonia, it can be concluded that domestic suppliers do exist, but they are practically inefficient, and do not have the technological capabilities. In terms of the sophistication of companies, it can be said that their production processes are mainly labor intensive, the scope of marketing activities is restricted and limited to marketing tools and techniques which are used. International distribution, a field where relatively poor results are accomplished in this pillar, is mainly controlled by foreign companies, and there is no great willingness among top management to delegate authority, nor surrender of control over making important decisions. Companies in Macedonia are mainly engaged in resource extraction or production, unlike the developed countries, where companies focus on product design, marketing and sales, logistics and after-sales services. This is confirmed with the values of the categories in the subindex for **innovation**, where the worst results are observed in capacity for innovation, availability of scientists and engineers, application, quality of scientific research institutions and PCT patents.

1.3. Europe 2020 Competitiveness Index

The Europe 2020 Competitiveness Index is another index published by the World Economic Forum (WEF), now in The Europe 2020 Competitiveness Report. According to this index, for Republic of Macedonia as a candidate country, it is necessary to advance its institutional capacity as a basis for a knowledge-based economy. In this regard, the country has seen improvements in the smart growth sub-index since 2010, characterized by, at the basis, higher competition, fewer administrative burdens to open a business and a slight but continuous improvement in access to finance.⁶

⁶ *The Europe 2020 Competitiveness Report: Building a More Competitive Europe 2014*, World Economic Forum, 2014, p.30.

Figure 1: Competitiveness Performance of Central and Eastern Europe and Candidate Countries by Pillar



Source: *The Europe 2020 Competitiveness Report: Building a More Competitive Europe 2014*, World Economic Forum, 2014, p.30.

Notes: Central and Eastern Europe: Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia; EU candidate countries (excluding Iceland): Macedonia FYR, Montenegro, Serbia, Turkey.

Improvements in the ICT infrastructure, such as mobile phones and internet bandwidth, and their use, have helped the country advance its digital agenda. However, Republic of Macedonia faces multiple challenges in the areas of education and training, innovation and environmental sustainability. It is also notable that the country registered deterioration in its labour market efficiency and participation, driven by a dramatic rise in youth unemployment for over 50% and low overall participation in the labour market.⁷

In general, EU candidate countries, with the exception of Iceland, depict a competitiveness profile similar to those of Central and Eastern Europe. This pattern is present across all seven dimensions analyzed (Figure 1). Preparing the countries for accession will require addressing their specific competitiveness weaknesses.

⁷ *The Europe 2020 Competitiveness Report: Building a More Competitive Europe 2014*, World Economic Forum, 2014, p.31.

1.4. EBRD transition indicators

Transitional indicators published by the EBRD are one of the many indicators that show the conditions of the competitiveness of the country. Based on the institutional framework of the countries in transition, structural indicators in the field of trade and the competitiveness of the market can be analyzed, which directly expresses the degree of competitiveness of the national economy.

Table 2: EBRD transition indicators - structural reforms in Republic of Macedonia

	Republic of Macedonia				
	2008	2009	2010	2011	2012
Large scale privatization	3,3	3,3	3,3	3,3	3,3
Small scale privatization	4,0	4,0	4,0	4,0	4,0
Governance and enterprise restructuring	2,7	2,7	2,7	2,7	2,7
Price liberalization	4,3	4,3	4,3	4,3	4,3
Trade & Forex system	4,3	4,3	4,3	4,3	4,3
Competition Policy	2,3	2,3	2,3	2,7	2,7

Source: <http://www.ebrd.com/pages/research/economics/data/macro.shtml#ti>

In this context, the best results are achieved in the area of price liberalization, trade and exchange rate (Table 2), which includes a comprehensive liberalization of prices and removal of all quantitative and administrative restrictions on export and import. The worst results perceived in the field of policy competition, where progress can be reported on value of the indicator in 2011 and 2012 (2.7), compared to the one from previous years. But the value of this indicator indicates that it is necessary to additionally improve legislation and institutions in the field on competition.

1.5. Macedonian export competitiveness

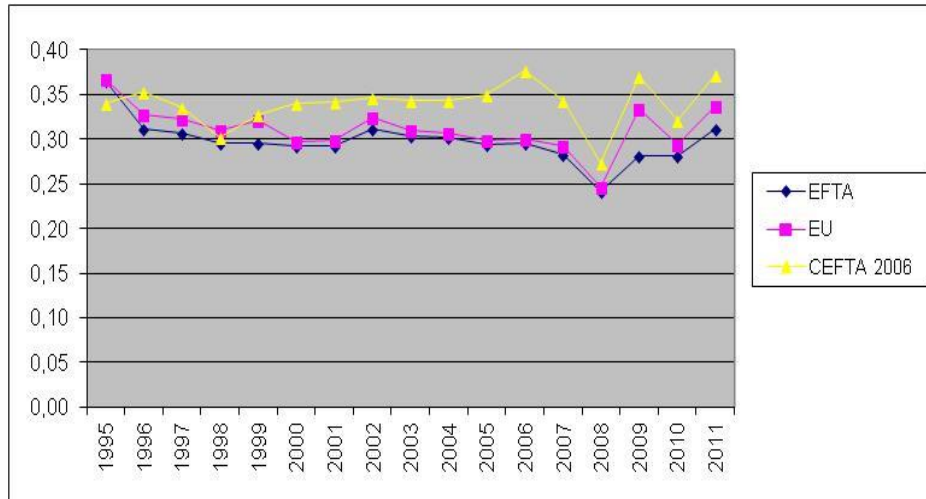
In order to get a full picture of the situation in the Macedonian economy's competitiveness, it is necessary to assess its export competitiveness. This is particularly important given the fact that Republic of Macedonia is a small country with a relatively small market, and the average level of development and the foreign trade is particularly important for its development.

There are several indicators of export competitiveness such as: share of export of the domestic economy in world exports, the index of complementarity of exports, intra-industry trade, index of comparative advantages, the coverage of imports by exports, and the index of specialization (concentration) of exports (imports). In this paper we will discuss only some of them. Since the share of export of the domestic economy in world exports, the coverage of imports by exports, and the index of specialization (concentration) of exports (imports) are most often analyzed indicators, first we will focus on the index of complementarity of exports, and the index of comparative advantages as more specific indicators, and then we will briefly point out the value of other mentioned indicators.

The index of complementarity assesses the adequacy of preferential trade agreement between two specific economies (or groups of countries), regarding the structure of exports of the potential partners, i.e. whether it does or does not match the imports of the other potential partner. If the complementarity index is greater than 1, it indicates that the two countries have trade complementarities of goods. The larger the value, the higher the degree of complementarity and vice versa.

Here are evaluated complementarity indexes of the export in the country in terms of EU, EFTA, CEFTA 2006. According to the data shown in Figure 2, the index is not as high. It is obvious that this index is the highest in the exchange of Republic of Macedonia with CEFTA 2006 countries, as another way of confirming the fact that a similar culture, language, needs, level of development, etc. are the determining values in the success. This index confirms the inadequate export structure, especially given that the EU is the largest partner where Macedonian goods are exported, which is lowest value index. This shows that in the future it is necessary to work in terms of improving the structure and competitiveness of Macedonian exports.

Figure 2: Index of complementarity of exports in Republic of Macedonia in terms of EU, EFTA, CEFTA 2006 (1995-2011)



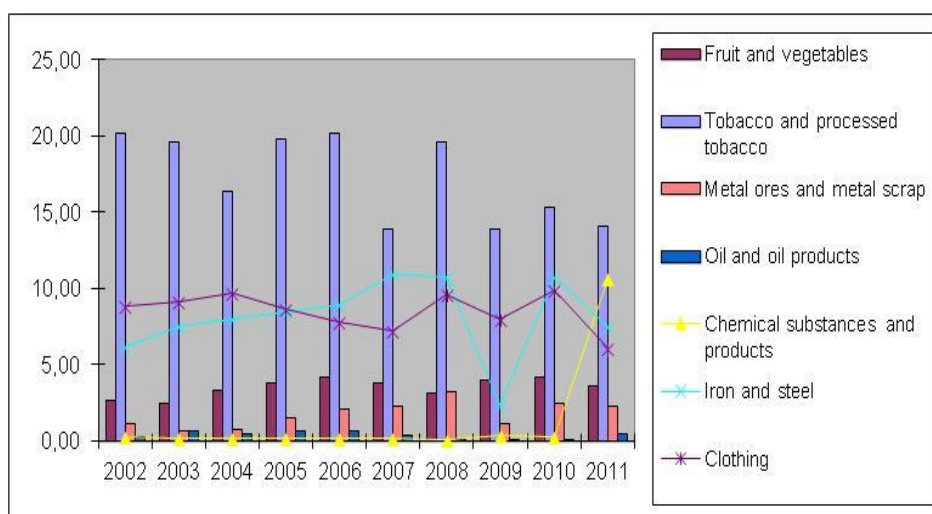
Source: Author's calculation based on data from UNCTADStat

The next index that provides information on the conditions in the export's competitiveness is the index of comparative advantage (Revealed Comparative Advantage Index - RCA), which was proposed by Balassa in 1965. It indicates the relationship between the share of export of certain products in the total export of goods of a particular country and the share of exports of a particular product in total export of goods in the world. If the ratio is greater than 1, it means that the specified goods or products of that country show a comparative advantage, and vice versa.

The comparative advantages of several major export products in the country, i.e. seven products that were considered almost the most important in the export structure of the country are evaluated here. The values of this index in Figure 3 show that in several of these products, specifically in five of them, the index is above one, indicating the comparative advantage of these products on the world market. These include fruit and vegetables, tobacco and processed tobacco, metal ores and metal scrap, iron, steel and clothing. Products that do not have a comparative advantage are oil and oil products, and chemical substances and products. If we start from the fact that the three most important export products of the country are: iron and steel, clothing, oil and oil products, and at the same time make a parallel with the index values of

the comparative advantages of these three products (and for other products), we will again realize that the situation in the export structure should be changed. The product with the highest value of the index of comparative advantage in relation to other products is tobacco and processed tobacco, but it is not included in the group of the top five most exported products. Another disappointing aspect is the backdrop of the category of oil and oil products. This category, as the third most exported product according this index, has a value close to zero i.e. below one, and this means that it is a product without a comparative market value. Slightly more favorable aspect is shown by iron and steel, which are mentioned as the most exported products over the years, which have relatively higher index of comparative advantage compared to other products. All these aspects again point to the fact that there is inappropriate structure of exports and low export competitiveness, which certainly requires appropriate changes.

Figure 3: Index of comparative advantage of seven major export products in the Republic of Macedonia (2002-2011)



Source: Author's calculation based on data from UNCTADStat

Insufficient export competitiveness is also confirmed by the indicator share of export of the domestic economy in world exports, with value in the last ten years of approximately 0.022%, which is a relatively

low value⁸ Then, confirmation of the lack of export competitiveness is the index of coverage of imports by exports, which is around 65.5% and it does not indicate any improvement in the last ten years, while the average level of coverage for countries like Macedonia is 70% to 80%. High geographic and product concentration of Macedonian export is another confirmation of the lack of competitiveness of Macedonian exports. Almost 50% of exports is concentrated in the three groups of products (iron and steel, clothing, petroleum and petroleum products), and also 50% of exports are concentrated in just three trading partners (Serbia, Germany and Greece, and in the years after the independence of Kosovo, the prime from Serbia has been transferred to Kosovo), which makes the economy vulnerable to shocks.⁹ All these indicators on export competitiveness of the Macedonian economy point to the inevitable need for change.

2. Factors, policies and incentives to increase the Macedonian economy competitiveness

Competitiveness is the basic assumption of the development of Republic of Macedonia. It should be accomplished comprehensively, primarily aimed at creating the necessary conditions for its actions. In this regard, despite the macroeconomic conditions, the primary position was restructuring of production in quality, standard and price according to the requirements of domestic and especially foreign market.

The analyzed parameters and indicators show a significant improvement in the competitive position of the Macedonian economy. But the indisputable fact is that there are still some weaknesses in terms of factors of competitiveness, especially in the part of the export structure and export competitiveness. Therefore, further structural reforms are key to ensure that the economy has the necessary flexibility to respond to shocks and to create conditions for diversification of sources of growth. Some specific recommendations follow, arising from the national and international research of the Macedonian economy's competitiveness.

Since the good infrastructure is the basis for rapid growth and development, better competitiveness of the economy, faster flow of

⁸ UNCTADStat, <http://unctad.org/en/Pages/Statistics.aspx>

⁹ See more in: Stancheva-Gigov I., Impact of foreign trade on economic growth in the Republic of Macedonia, Institute of Economics – Skopje, Skopje, 2013.

people, goods and passengers, the realization of capital infrastructure projects should be intensified. That will contribute to increase in the competitiveness of the national economy. It is also necessary to increase: the quality level of the workforce, the low level of participation of women in the labor force, the low country's capacity to retain talent and to attract talent and the low level of reliance on professional management. In order to enhance the competitiveness of enterprises, it is necessary to develop and modernize the working knowledge and capacity in the sector of small and medium enterprises. In the long term, Macedonia must pay more attention to encouraging the development of new production facilities with higher added value, market research and innovation, increasing costs for research and development and cooperation between science and business. In this context it is important to identify companies that have the potential to introduce new technologies in their production, through their own research or in cooperation with universities and innovators in Macedonia that have their own patents. There is a big problem about the penetration in foreign markets, which is currently an obstacle for many companies. Export potential of SMEs is still quite limited. In this context, market entry, registering property, enforcing contracts, issuance of construction permits, trading across borders are areas where weaknesses exist, which have to be overcome in the future. Macedonian exports are focused only on few products, which seems quite a vulnerable position in respect to fluctuations of international markets. It seems that Macedonia needs a promotion and encouraging of new export products and services, and thus diversification of exports to reduce their existing problems with the current account and increase export competitiveness. It is also necessary to invest in increasing the level of technological development in Macedonia.

The strengthening of competitiveness will be increasingly a strong factor for GDP growth and stimulating development. The strengthening of competitiveness with other development factors will contribute to a successful transformation of the Republic of Macedonia in a modern state with a modern economy integrated into the European, and global economic trends.

3. Concluding remarks

The review of existing research on the competitiveness of the Macedonian economy gives fairly positive picture of the progress the country has made in the last period. This is best shown through the data in the reports of the World Economic Forum, reports of Doing Business by the World Bank, the EBRD Transition indicators and other reputable reports, where Macedonia is recognized as a leader in the SEE region. But, despite the significant progress made in terms of competitiveness, Macedonian economy is still vulnerable. It still relies on cheap labor, low productivity reflected by low salaries and infrastructure which needs to be improved in the future. To stay in the competition phase driven by factors of efficiency, Macedonia should strive towards high quality education, efficient labor market, strong exports and the ability to exploit the benefits of existing technologies, and it can be conducted in parallel with strengthening the public and the private sector.

In times of globalization and increased competitive pressure, a major challenge for the Republic of Macedonia continues to be the development of knowledge-based economy, development of small and medium enterprises, innovation, creating new jobs and reducing long-term unemployment and youth unemployment, continuous improvement of business environment, diversification and expansion of exports, development of new technologies, encouraging investment and attracting FDI activity and strengthening of legal certainty. All these structural reforms are necessary in order to continue with increasing competitiveness of the economy, and to strengthen the quality of a functioning market economy that will be able to cope with competitive forces after joining the EU. All these activities lead to increased competitiveness on the domestic, regional and international markets.

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Original scientific paper

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**ORGANIZATIONAL IMPROVEMENT OF PRODUCER'S
ASSOCIATION OF ORGANIC PRODUCTION IN REPUBLIC OF
MACEDONIA**

Abstract

Total quality management (TQM) have proven very valuable to companies and organizations as an integrative approach anchored in the belief that long-term success depends on unique commitment to quality in all departments of an organization. One important approach in agriculture whose base is the commitment to quality in all phase of working and production is organic agriculture. Republic of Macedonia is not lagging behind in development of organic agriculture, but the producers are facing problems such as poor market organization and insufficient quantity of products for sale. The paper attempts to show that TQM can improve the organization of producer's associations of organic products with "continuous improvements" as a strategy for the competitive position and improvement in organizing.

Key words: *TQM, continuous improvement, associations, organic production, Republic of Macedonia.*

JEL classification: *Q12; Q13*

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Introduction

Organic production in Republic of Macedonia provides producers to appear on the same market with quality products which in turn is related to the possibility of achieving higher profits compared to when they could produce products in a conventional way, and large subsidies granted by the state. They, unlike other types of associations of agricultural producers, are united by a very important denominator that certifies the method and procedure of producing organic products, so that the quality of the product is indisputable. However, research shows that producers consistently comply with the rules for organic production, but that they also face serious problems in performance and continuous presence on the market. In terms of managing these issues, the need for a new approach to management emerges, with the base of multidimensionality of the quality, its operation and function in all spheres of social life. The concept of Total Quality Management - TQM is a way of organizing and innovative management tool by which the producers' associations of organic products have the potential to improve the organization and thus winning and maintaining the market, and achieving a recognizable brand, and a higher level of development in terms of quality assurance.

The main objective of this paper is to investigate the possibilities of applying TQM as way of organizing the association of organic producers in the country in order to ensure improvement and progress in the work of associations of organic producers. The emphasis will be put on "continuous improvements" as principle of TQM and an approach to quality as strategy for the competitive position improvement in organizing. Research subject of the paper is principle "continuous improvements" and principles of work that are used to organize and based on the difference between them to see how and how TQM can integrate in organization of the association of producers of organic production. For that purpose research in the paper is based on analysis of data obtained through interviews with the members of associations of producers of organic products in Republic of Macedonia on a previously prepared questionnaire with qualitative and quantitative data as well as their published information.

1. The meaning of continuous improvement in the concept of Total Quality Management

TQM integrates various initiatives in the field of quality to allow for the needs and requirements of customers and employees with the highest efficiency in the company in every aspect such as low cost, high income, respectively employed and satisfied customers. It is the process of creating the quality care and responsibility through total commitment and continuous improvement in all aspects of operations. This concept gives importance to quality and performance in the organization of work not only in the adequate sector, but in all sectors. Thus quality extends across all sectors and in all functions and takes on a new role - the quality of the work and organization of work.

In Masaaki Imai's book "Kaizen" an interesting connection between quality and the continuous improvement² is presented. They consider that quality can be achieved through internal and external improvements. Internal improvement means to prevent defects and problems in internal processes which leads to lower costs, and external improvement means to increase customer satisfaction and thereby achieve a bigger market share. Both types of improvements are closely connected to the quality improvement process. It means that quality in working can be achieved through continuous and consistent identifying, investigating, analyzing and solving work-related problems.

The TQM philosophy provides the overall concept that fosters continuous improvement in an organization. Continuous improvement is essential for successful TQM, it gears the organization toward attainment of the vision. The improvement system must not only be continuously applied, but also consistently, throughout the organization. This requires a disciplined continuous improvement based on trust, with everyone in the organization striving to improve the system.³

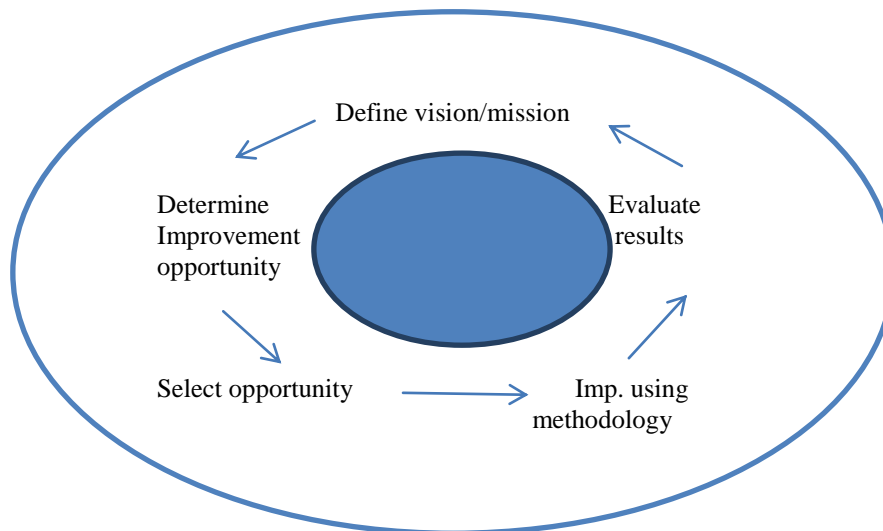
Continuous improvement can be shown as cycle that includes five stages. (Figure 1) The cycle starts by defining the vision or mission of the organization. The leaders determine the vision, with input from everyone. Then everyone in the organization ascertains their specific mission to accomplish the overall vision. In doing so this, the focus and priorities of the vision are determined, established, understood and supported by all.

² Ibid, p.32.

³ Eriksson H., "Benefits from TQM for Organizational Performance", Lulea University of Technology, Porson, Sweden, 2002.

After defining their vision, the next phase includes listing all improvement opportunities. It is important to obtain an understanding process of determining improvement opportunity at this stage. Customers are identified and their needs and expectations understood. Suppliers also are matched with requirements. Any potential problems are identified during this process. For the third stage of selecting improvement opportunity, specific improvement opportunities are selected based on the critical processes that have the greatest impact on customer satisfaction. These problems are solved using a disciplined methodology such as statistical process control, quality function deployment and process analysis. They should be used consistently to complete a mission, improve a process and solve problems throughout the organization. Finally, similar to PDCA cycle, the results for the impact of improvements are evaluated against the overall mission. In this case, a sixth stage is stage of accepting or repeating the process. The cycle is never ending in a continuous improvement system.

Figure 1: Continuous improvement cycle

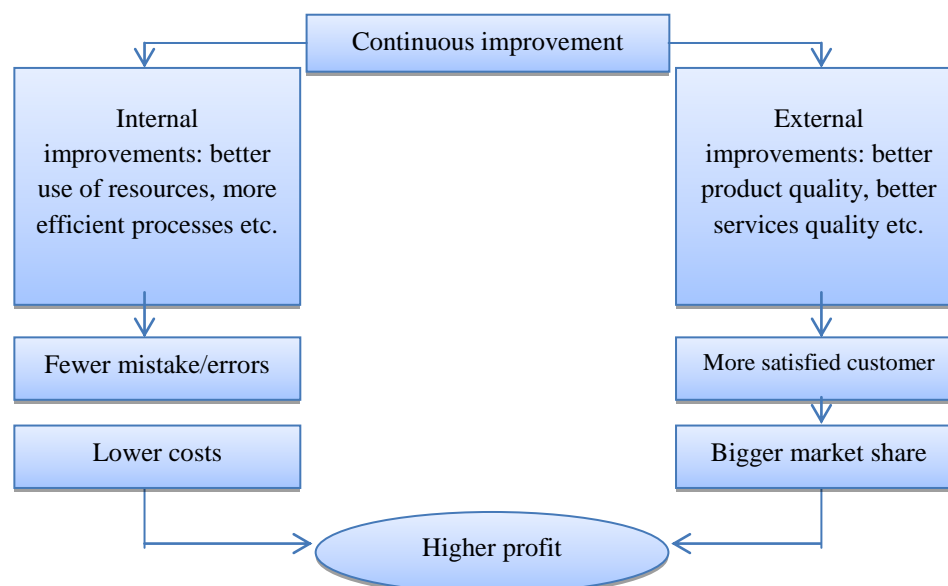


Source: Saylor J., “Continuously improving achieves excellence”,
<http://www.thebusinesscoach.org/continuous%20improvement.pdf>, 25.09.2014

Continuous improvement can be achieved through internal and external quality improvements. (Figure 2) Internal improvements refer to the utilization of resources and preventing defects and problems in the

process. Gradually, this result in the effectiveness of controlling and minimizing production costs which in turn yield to higher profits. Similarly, external quality improvements put more emphasis on designing quality into the product, which aims to earn higher profits by remaining competitive with a bigger market share. This can be done through the ability of companies to respond quickly to the demands of their customer and offering them with a better value added services. As the figure shows, both types of quality improvements – which should be seen independently of each other – result in higher profits.

Figure 2: Continuous improvement and their consequences



Source: Dahlgaard J., Kristensen K., Kanji G., “Fundamentals of Total Quality Management”, Taylor & Francis, London, 2002.

According to International Standard Association – ISO key benefits of continuous improvement are performance advantage through improved organizational capabilities, alignment of improvement activities at all levels to an organization’s strategic intent and flexibility to react quickly to opportunities. Applying the principle of continual improvement typically leads to:⁴

⁴ Quality Management principles, www.iso.org/iso/qmp_2012.pdf 15.11.2013

- Employing a consistent organization – wide approach to continual improvement of the organization's performance.
- Providing people with training in the methods and tools of continual improvement.
- Making continual improvement of products, processes and systems an objective for every individual in the organization.
- Establishing goals to guide and measures to tack, continual improvement.
- Recognizing and acknowledging improvements.

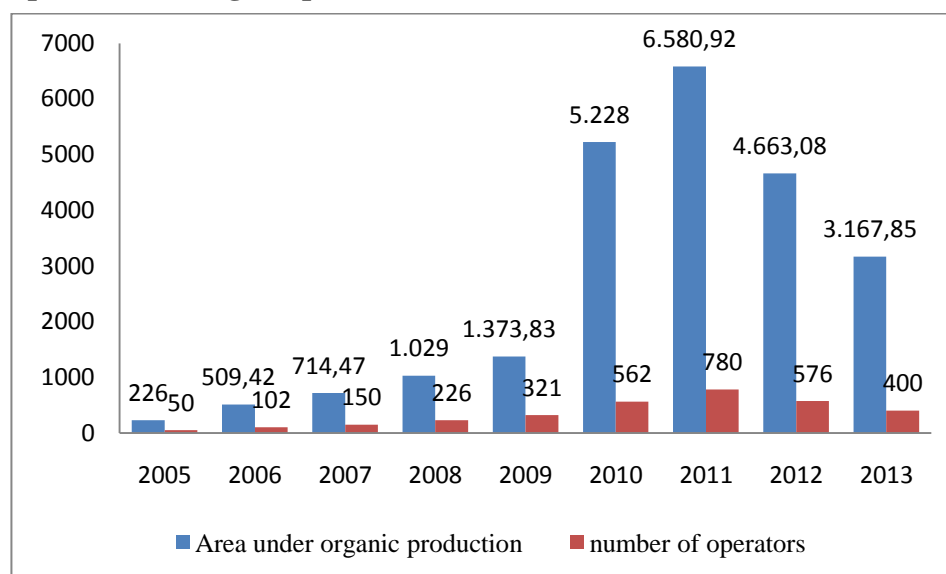
The management's job is to provide the leadership for continual improvement and innovation in process and systems, products and services. Achieving the highest levels of performance requires a well – defined and well – executed approach to continuous improvement and learning. Improvement and learning need to be embedded in the way an organization operates. This means they should be a regular part of the daily work, seeking to eliminate problems and their source, and being driven by opportunities to do better as well as by problems that need to be corrected.

2. Status of the organic sector in Republic of Macedonia

Organic production is recognized as one of the ways that lead to sustainable development, meeting social expectations when it comes to environmental and sustainable management of natural conditions and development of rural areas. Republic of Macedonia has excellent conditions for the development of organic agriculture because agricultural production in the country is traditionally a family business which involves local knowledge and traditions. Macedonian agriculture has undergone diverse methods and ways of functioning in social and economic development, but always remained an activity that takes place within the family. Also, taking into account the 2002 Census, according to which 43% of the population, 36% of the workforce and 44% of the poor live in rural areas, the adoption of the concept of organic farming by appropriate agriculture policy can contribute to increase employment and improve the living standards of the population.

In total cultivated land, organic production is 2,74%.⁵ Graph 1 clearly shows that the interest for the conversion of this production was in intensive growth especially in the period 2005-2011, however, last two years the interest has been decreasing. Research shows that producers of organic products consistently comply with the rules and procedures or standards for organic production, but that they also face serious problems in performance and continuous market presence and fragmentation i.e. in one region there are several association for the same product.⁶ The inadequate internal organization of associations of producers of organic products and insufficient quantity ranking is forcing manufacturers to sell their products as conventional, for lower price, which leads to the fact that after selling organic products as conventional, there is a reduced interest in this way of production.

Graph 1: Area under organic production and the number of operators during the period 2005-2012



Source: Ministry of Agriculture, Forestry and Water Management of Republic of Macedonia,
http://www.mzsv.gov.mk/organsko_zemjodelsko_proizvodstvo2013.pdf
22.09.2014

⁵ Annual report for agriculture and rural development 2012, MZSV,
http://www.mzsv.gov.mk/files/GIZRR_2012.pdf 30.12.2013

⁶ Ibidem.

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, environmental, social, health and economic structures are included. 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.

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 the products are "ecological, quality and ours". Hence, the next challenge is directing the attention away from the production of quality products (such as organic products) to promote full management of all aspects of working in associations.

3. Analyzes and research findings in current situations in producer's associations of organic production

Because the purpose of the paper is to investigate the possibilities of applying TQM as a way of organizing the association of organic producers with emphasis on "continuous improvements" as principle of TQM, a survey were launched on the use of certain principles in the operation of associations and in relation to continuous improvement.

According to the Central Registry of the Republic of Macedonia as the only institution that maintains records of producers associations of organic food, there is no exact number of registered associations of producers of organic food because they are registered with the Law on Associations and Foundations based on Articles 5, 18 and 20 belong to organizations and non-profit sector in which data associations are protected in accordance with regulations to protect personal data and classified information.⁷ The questionnaire was sent to the highest form of organized associations in the country - Federation of Producers of organic products which includes nine regional associations, of which four (4) Associations ("Organik kaki" – Valandovo, "Aronia" - Gevgelija, "Ovcepolski eko-proizvodi" - Sveti Nikole and "Eko-Sar" - Gostivar) and sixty-five (65) members - manufacturers responded to the questions.

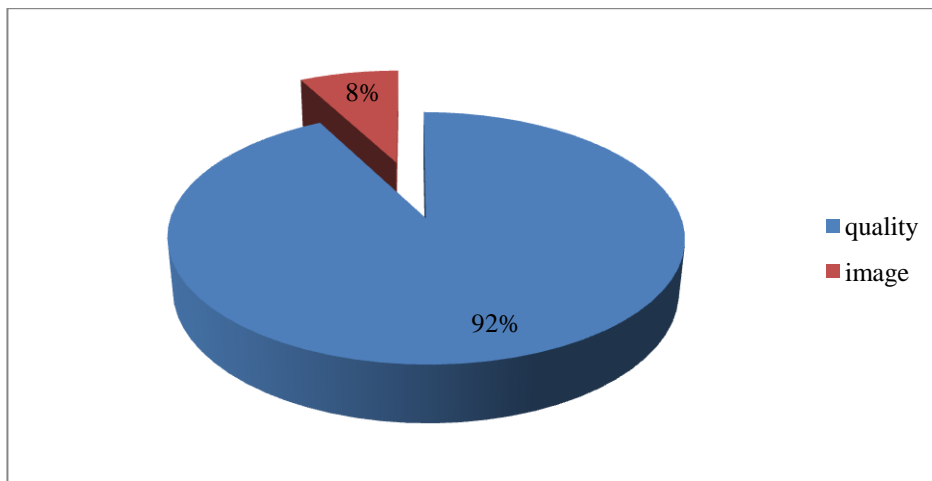
The question, "How do you see the benefits of organic production?" All sixty-five (65) respondents said 'total quality in

⁷ Official Gazette No.52, 16.4.2010.

production and operation, reduction of total cost and customer satisfaction". This shows that manufacturers know organic production as production for its high quality products with lower costs in order to meet the needs and demands of consumers. The same applies to the principles of TQM. TQM is a way of working and organizing the work with full dedication to quality, reducing costs and meeting the needs and requirements of customers. Hence, we can say that there is a possibility of applying the principles of TQM in the organization and operation of associations because manufacturers create quality during the production of organic products, but the same principles need to be transferred in the way of organization and operation of associations to reorganize and improve operational and organizational capabilities, knowledge and skills of the producer associations of producers of organic products.

When asked, "According to you, what is the key to competitiveness of organic products?" sixty (60) manufacturers responded that the quality and five (5) that is the image (Graph 2). The most important feature of organic products is quality, hence manufacturers to compete in the market with organic products, leading idea should be that it is a product of exceptional quality. The results of this question confirmed it.

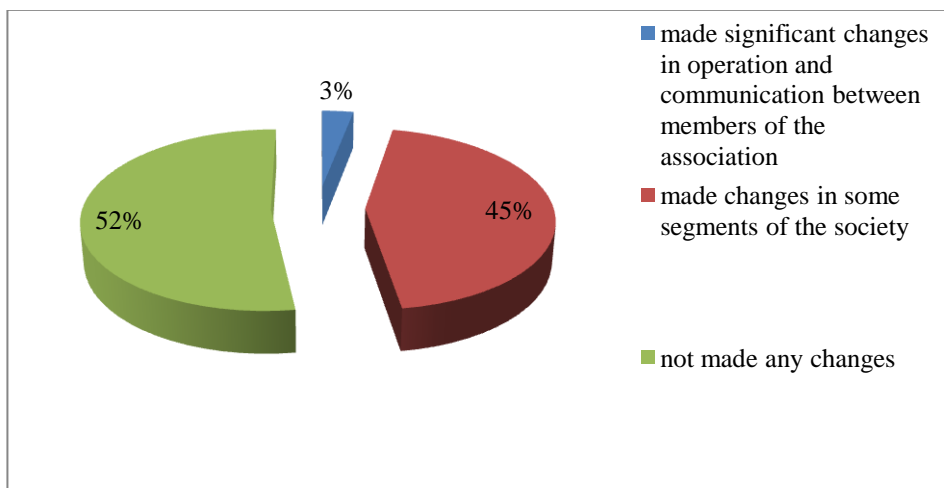
Graph 2: According to you, what is the key to competitiveness of organic products?



Source: Own research

The question, "What changes have you made in the work of the association in recent years?" thirty-four (34) respondents answered that they have not made any changes, twenty-nine (29) have made changes in some segments of the work of the association and two (2) said they have made significant changes in the operation (Graph 3). The issue is set to find out whether the associations are subject to change at work and it showed that the associations in recent years there is a significant and major change. In terms of the principles of TQM, this means that a systematic approach to change is required, as well as understanding of TQM and experience in the operation and organization of associations of producers of organic products.

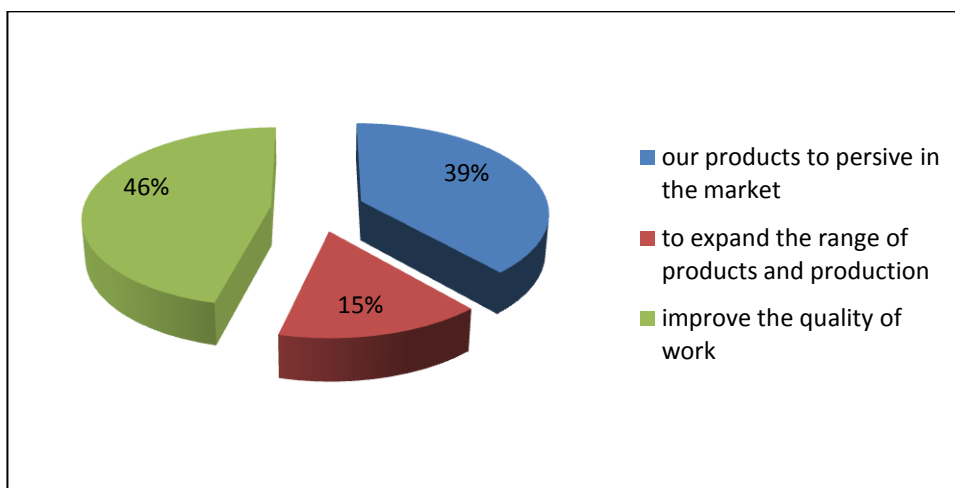
Graph 3: What changes have you made in the work of the association in recent years?



Source: Own research

The question, "What is your vision of the association in the next five years?" Thirty (30) respondents answered "improve the quality of work," twenty-five (25) members responded "our products to survive on the market" and ten (10) responded "to expand the range of products and increase production". (Graph 4) This indicates that the association is a desire to improve the quality of work that relates to the possibility of change and new ways of organizing and running of the association or the possibility of applying the principles of TQM.

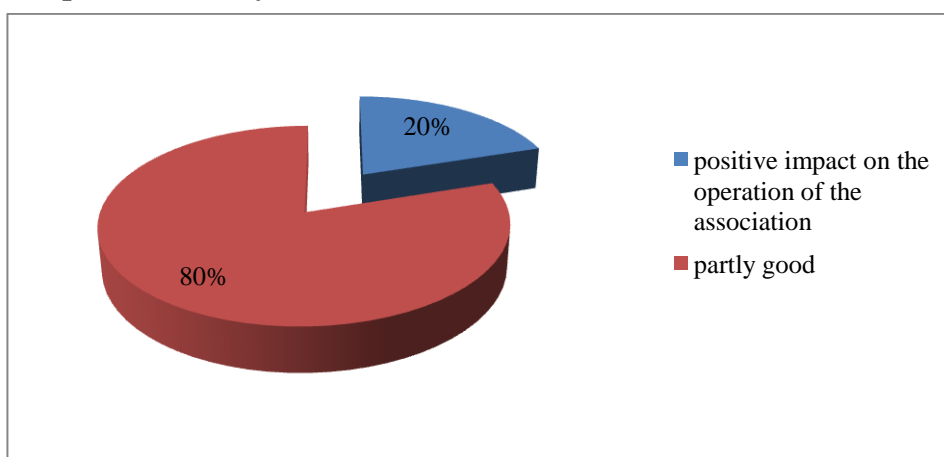
Graph 4: What is your vision of the association in the next 5 years?



Source: Own research

The question, "How do you evaluate teamwork in associations?" fifty-two (52) said that it is partly good, and thirteen (13) respondents answered that it positively affects the operation of the association (Graph 5). It shows that teamwork in associations exists, but is not satisfactory i.e. existence does not provide a positive atmosphere in the work, which means it is necessary to create teams that will be responsible for certain activities and tasks to achieve the given objectives of the association.

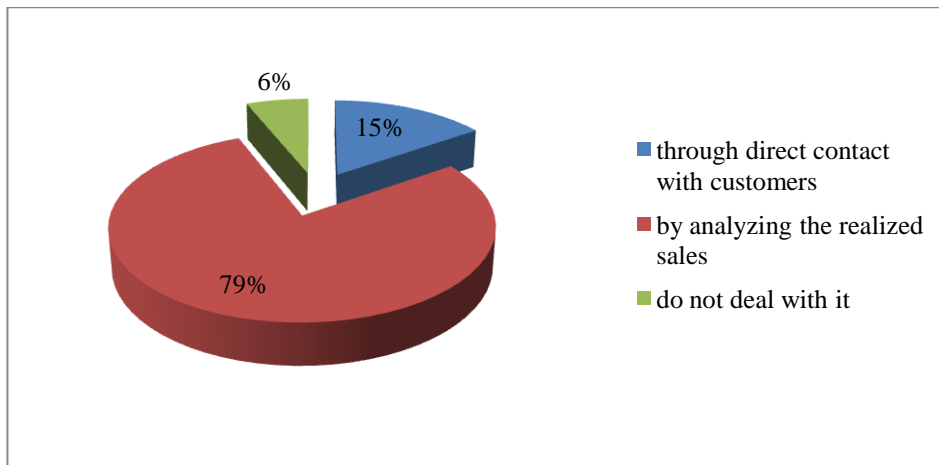
Graph 5: How do you evaluate teamwork in association?



Source: Own research

On the question "How do you measure customer satisfaction?" fifty-one (51) respondents answered that they do so by analyzing the realized sales, ten (10) by having direct contact with customers and four (4) not dealing with it at all (Graph 6). The results show that the associations of producers of organic products implementing quality measurement in accordance with the principles of TQM and indirectly measuring quality. Critical to the successful implementation of TQM is the knowledge of whether the requirements are met and customer needs, so more should be present direct measurement or contacts with customers and consumers.

Graph 6: How do you measure customer satisfaction?



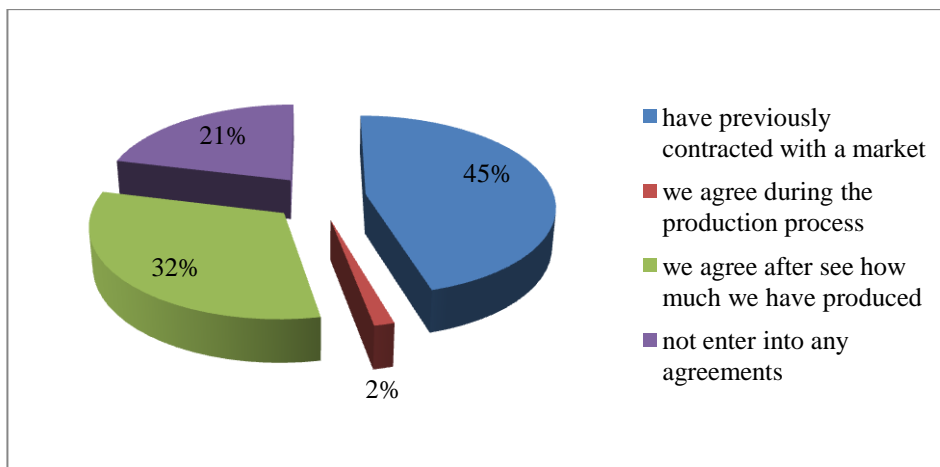
Source: Own research

On the question, "On what way members express the satisfaction for the work of the association?" all sixty-five (65) respondents answered that they do it in meetings, discussions with the opportunity to provide suggestions for improvement. It clearly shows that members express their opinions, views and ideas about the work of associations and influence the final decisions and the functioning of the work of the association.

On the question, "How the associations arrange the placement of production?" thirty (30) respondents said that they have previously signed contracts, twenty-one (21) answered that it is arranged once the production process, fourteen (14) manufacturers responded that they haven't concluded contracts and one (1) shall agree during the manufacturing process (Graph 7). The results show that the association is

mainly contract farming, but still high percentage of organizations who do not contract or agreeing on the spot - once the production process starts.

Graph 7: How the associations arrange the placement of production?



Source: Own research

From the above, it can be concluded that in terms of the principles of operation of the associations related to continuous improvement, most of the associations have not made any changes, but there is also a desire for change and it relates to improving the quality of work. The associations use indirect measuring of customer satisfaction and mainly have previously signed contracts, but still there is high percentage of associations which do not use contracts. Producers have the opportunities to express their opinions and ideas, but the team work does not provide positive atmosphere in the associations.

4. Continuous improvement – an opportunity for integrating TQM in producers' associations of organic products

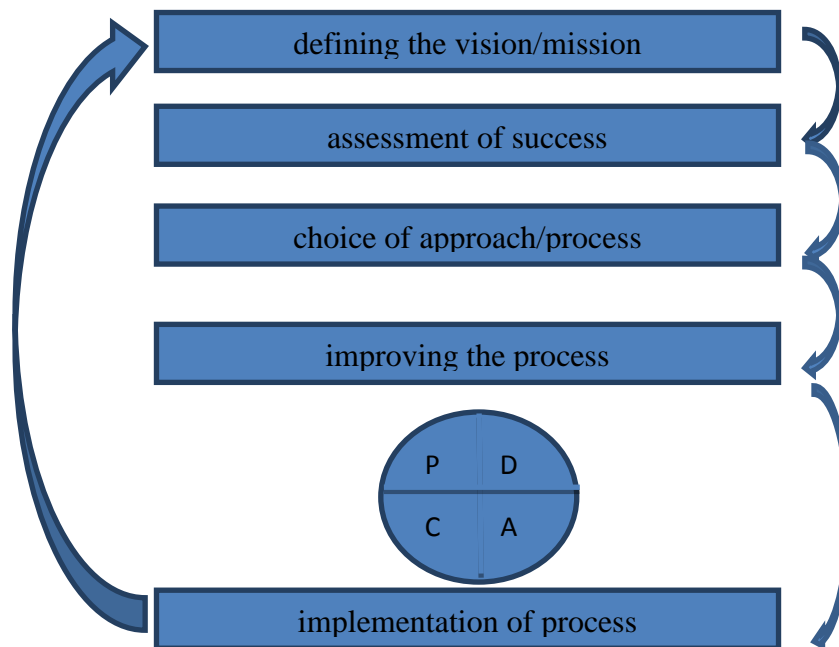
TQM is a vision of a company or organization that can be achieved with long-term planning, commitment and full responsibility of all stakeholders at all levels and sectors and continuous improvement in all aspects of operations. It requires full responsibility of everybody, the members and the presidencies of the associations. Continuous

improvement is an important process in the application of TQM, which starts from the presidency of the association and continues at all levels and stages of operation. The first step in the process is that all members of the associations understand that their job is very important part in the operation and organization of associations and requires full commitment. It is a process that never stops, bringing in gradual improvements.

Continuous improvement is a process that generally takes place in five stages: planning, assessment of success, choice of approach/process that will be applied, advancing of the process, and establishing of the process. (Figure 3)

1. Planning or defining the vision or mission of the associations is stage when the presidency identifies customer requirements by researching them, as well as the expectations of the customer to establish guidelines by which the activities will be progressing. At this stage the inclusion of both is important, the presidency and the members of associations. In this way, the priorities of the vision or mission are defined, understood and supported by all.

Figure 3: Continuous improvement in organizing the producers' association of organic product under the principles of TQM



2. Assessment of success is stage in which the association should establish the ability to effectively use the resources it has. In this sense, the focus is on reduction or cost savings and time period. To achieve this, associations should:
 - shape the system to collect data on how to perform certain activity,
 - determine measures that represent appropriate indicators such as level of assets, degree of utilization etc.,
 - analysis of costs per activity which determines the cost of activities which create added value and those that do not,
 - analysis of weather cycles or periods of activity when it is required to perform a specific activity,
 - setting new goals for performance of comparison with the competition,
 - reporting to perform synthesis task and activities relating to the utilization of resources and the same to be used in future new targets.
3. Choice of approach/process that will be applied or analysis of the process is performed in order to study in detail the steps in the process to successfully be performed promotion. This step includes:
 - assessment of the resources – basic activity that should be done to start promoting,
 - identify opportunities for improvement,
 - determination of the child process as part of promotion. Namely, the child process is possible to be removed from some significant purpose so process of its expansion can improve an entire process,
 - choice of access improvement (continuous),
 - report or synthesis of all the facts relating to assessment of the current state of the process of continuous improvement priority.
4. Advancing of the process or improving the process aims to establish a process by which the best way will achieve the customer requirements, and implement the principle of Deming's cycle (PDCA). In this step it is necessary to determine the reasons for the occurrence of problems and their sources. In this sense the concept of PDCA directs attention to the source of the causes of existing problems and there is opportunity for improvement.

5. Establishing of the process or implementation of change is a step in the continuous improvement of organization in which decisions need to be implemented and enforced through three basic stages:
 - Pilot implementation, stage when are investigating whether the solution is adequate and the result gives the opportunity to make corrections.
 - Preparation of action plan, stage when the actions are detailing to be taken during implementation. They include: setting priorities, making a definite plan for implementation and revision of priorities.
 - Implementation of the plan.

The implementation of TQM as way of organizing in associations should include both approaches of continuous improvement:

- Internal improvement, perceived in the setting clear, unambiguous communication between members and thus networking, creating teamwork viewed in two ways:
 - Vertical – teamwork between presidency and all members of the association,
 - Horizontal – teamwork within work groups and across functional lines between two or more associations
- External improvement, can be seen in developing cooperation with other association, consulting firms and universities, promotion of knowledge and education, direct measurement of consumer satisfaction, thereby achieving customer satisfaction and community.

When continuous improvement and TQM will be accepted by all and at all levels of the association will lead to significant improvements and excellent results. These results are related with achieving higher quality of working, mutual satisfaction, improved organization which realizes higher profit, and ultimately a better market position.

Conclusion

Given that organic farming is a way of growing plants and livestock products and their processing by creating quality principle in all aspects, there is a logical exploration of the possibility of application of TQM as a way of organization and operation of associations of producers of organic products. The research results in this paper showed that in the

associations of producers of organic products in Republic of Macedonia is possible to implement TQM as a way of organization and operation of associations of producers of organic products, primarily due to recognition of organic products under the concepts of TQM - total quality in manufacture and operation, cost reduction and customer satisfaction. For integration of TQM it is necessary to focus attention to organization of work with continuous improvement at all levels and stages of operation.

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Original scientific paper

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**FISCAL DECENTRALIZATION AND INCOME INEQUALITY –
CROSS SECTION ANALISYS OF CENTRAL AND
SOUTHEASTERN EUROPEAN COUNTRIES**

Abstract

This paper explores the effects of public sector decentralization on income inequality in Central and Southeastern European countries over the last two decades. Although, there are many research papers regarding the benefits of fiscal decentralization, the negative effects of decentralization have not been researched enough so far. In relation to this, with this paper we try to contribute to a better explanation of the potential influence of fiscal decentralization on income redistribution in developing countries. In the second part of the paper, we conduct an empirical research to estimate the direction and significance of the potential effects of decentralization on income inequality in Central and Southeastern European countries. The results from the cross-country analysis, indicate that fiscal decentralization leads to a greater income inequality in the analyzed countries, regardless whether local governments are financed by their own sources of revenues or by fiscal transfers from the central government.

Key words: Fiscal decentralization, income inequality, GINI coefficient, Kuznet's hypothesis, CESEE countries.

JEL classification: H 70; H 73; D 31

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Introduction

The more equal income redistribution is often stated as one of the main political objectives of the government authorities, along with the macroeconomic stabilization and the efficient allocation of resources. On the other hand, the decentralization of public sector has been an expanding phenomenon in the past two to three decades in all European countries, especially in developing countries from Central and Southeastern Europe. However, recent theoretical and empirical research seem like have not paid enough attention to the potential effects of decentralization of income inequality in developing countries. Therefore, the purpose of this paper is to try to give a contribution to better understanding of the potential effects of fiscal decentralization on income inequality and to give an answer whether fiscal decentralization contributes to better or worse income redistribution in Central and Southeastern European countries.

Fiscal decentralization is not a policy goal per se. The ultimate goal of decentralization is to contribute to a more efficient public sector that will fit better the needs and preferences of citizens for public goods and services (Oates, 1972). The efficiency of the decentralization process depends among others on many economic, social, institutional and other factors in the countries. However in this paper, we will focus only on the effects of fiscal decentralization without analyzing the different political and administrative decentralization models.

The paper is organized as follows: first, we review the different theoretical concepts about the potential influence channels of fiscal decentralization on income redistribution; second, we briefly review the previous empirical studies on the relationship between fiscal decentralization and income inequality; and third, using a cross-section data, we try to estimate the impact of fiscal decentralization on income inequality in CESEE countries, over the last two decades.

The policy of income redistribution and the role of local governments

According to the classical theory of fiscal federalism (Musgrave, 1959), the income redistribution policy along with the macroeconomic stabilization policy, are more efficiently performed by the central

government, instead of local governments. In circumstances where local authorities engage in policy of income redistribution, the final result may be even more unequal income redistribution between regions and individuals, due to the mobility of citizens. According to Pauly (1973), decentralization will contribute to a greater income equality only if there is limited mobility of citizens. In such circumstances, the local governments that have a greater needs for redistributive policies can implement major social programs and more pronounced progressive taxation schemes, unlike other local governments that are facing more uniform income distribution.

Although income redistribution policy is primarily a responsibility of the central government, many authors agree that, depending on how the fiscal decentralization process was designed and implemented, decentralization can improve or worsen the equity in the resource and income redistribution between different regions and individuals in the country.

One argument that decentralization may cause a reduction in income inequality between individuals and regions can be found in the theory of decentralization of Oates (1999). Namely, decentralization is considered to increase efficiency in the allocation of resources and force government authorities to better apply the principle of maximizing the benefit of citizens (utility-maximizing government behavior). On the other hand, when it comes to the needs and preferences of citizens, local authorities have information advantages over the central government, and therefore decentralization is expected to contribute to a better match between public policies and citizens needs. Decentralization can also promote greater equality by bringing government closer to the citizens. Local authorities are better informed about the needs of the citizens and they can use this advantage for designing public policies that will be more in favor of citizens than the policies of the central government bureaucrats (Lessmann, 2011).

According to some authors, decentralization of governments is also considered to contribute to greater transparency and accountability in government policies (Neyapti, 2006). In other words, decentralization can reduce government corruption and can prevent the government authorities to act in favor of only small high-income powerful group of individuals. Therefore, the decentralization will lead to more equal income redistribution.

Despite arguments that decentralization will contribute to a reduction of income inequality, it seems that there are equal number of arguments that decentralization may influence the income redistribution in the opposite direction, causing greater income inequality.

First, greater decentralization reduces the capacity of the central government to implement income redistributive policies through social and economic transfers of resources from richer to poorer individuals and regions in the country. On the other hand, if the redistributive policy is assigned to local authorities, quite predictably, especially for poorer regions, local authorities will not have enough capacity to deal with the income differences. In this context, decentralization will lead to greater income inequality between regions, especially if there are large differences in the level of economic development (Prud'homme 1995).

Further, when local governments face insufficient fiscal capacity and resources, local government authorities can be easily exposed to pressure and lobbying by powerful groups in society to act in their favor and the final result will be greater income inequality. Therefore, the direction in which fiscal decentralization will affect income redistribution will depend primarily on fiscal capacities of local governments and the quality of overall governance in the country (Neyapti, 2006).

Brief review of previous empirical studies on decentralization and income inequality

The impact of fiscal decentralization on income redistribution is relatively new issue of empirical research and there are only few empirical studies that address this issue. Four of six empirical studies have shown that decentralization contributes to a greater regional disparities and worsens income distribution among individuals in the countries (Qiao et al. (2008), Sepulveda and Martinez - Vazquez (2011), Sacchi and Salotti (2014), etc.). These results are consistent with the basic principles of the classical theory of fiscal federalism (Musgrave, 1959), that income redistribution policy is better pursued by the central government, than by local governments.

Neyapti (2006) investigates the effect of fiscal decentralization on income inequality, in a sample of 54 countries. According to Neyapti (2006), the effect of decentralization on inequality varies depending on the level of governance quality, i.e. decentralization has stronger positive

impact on income equity in countries with higher levels of quality of governance.

Qiao et al. (2008) explore the impact of decentralization on regional inequality, over the period 1985 – 1998 in China. They conclude that in decentralized political system, there are terms of change between economic growth and fair regional distribution of resources, as two main objectives of the central government. According to them, decentralization has contributed to an increase in economic growth, on one hand, and to a substantial increase in inequality in the distribution of resources between regions, on the other hand.

Rodriguez-Pose and Ezcurra (2009) explore the impact of decentralization on regional inequality in 26 countries (19 developed countries and 7 developing countries) over the period 1990 - 2006. According to them, the impact of decentralization on regional inequality depends on the level of economic development of the country. In high-income countries, decentralization contributes to reducing regional inequality, while in countries of low and middle income groups, decentralization is associated with a significant increase in the differences between regions.

Sepulveda and Martinez - Vazquez (2011) explore the impact of decentralization on poverty and inequality, in a sample of 56 countries (34 developed countries and 22 developing countries) over the period 1971 - 2000. They conclude that decentralization increases income inequality in countries with smaller public sector, but this effect diminishes as the public sector size increases. Once the public sector size reaches a critical point, the decentralization is starting to reduce income inequality. According to Sepulveda and Martinez - Vazquez (2011), decentralization has a negative impact on income inequality in countries where the public sector has a significant share of the economy (over 20%).

Tselios et al. (2011) explore the relationship of decentralization, regional economic development and income inequality in Western European countries, over the period 1995 - 2000. According to them, the greater decentralization leads to greater income equality, but as the level of economic development of the regions increases, the effect of decentralization on reducing income inequality becomes smaller.

Sacchi and Salotti (2014) investigate the impact of decentralization on income inequality and economic differences between regions, in a sample of 23 OECD countries, over the period 1971 - 2000. They explore the

impact of decentralization, measured by seven different indicators and conclude that in all cases, decentralization increases income inequality. In addition, when decentralization means a greater autonomy of local governments, i.e. when local governments are financing with own revenues, instead with fiscal transfers from central government, the effect on income inequality is greater.

The previous empirical studies have shown that the impact of fiscal decentralization on income equality may depend on the influence of other factors, as the quality of political governance (Neyapti, 2006), the level of economic development of the country (Rodriguez-Pose and Ezcurra, 2009; Tselios et al., 2011), the model of local government financing (Sacchi and Salotti, 2014), etc.. Therefore, in countries with a higher level of economic development and higher quality of political governance, decentralization will be less distortive and may even lead to reduce the regional and income disparities.

Income inequality in Central and Southeastern European countries

This paper analyzes only the income differences among individuals, without taking into account the income and overall economic differences between regions within the countries. As a measure for the income inequality between individuals, we use the GINI coefficient, as defined by the World Bank².

The next table gives the descriptive statistics for the GINI coefficients for some countries from Central and Southeastern Europe. Countries with the most unequal income distribution in last decade, are: the Baltic countries (Latvia, Lithuania and Estonia), followed by Romania, Poland and Bulgaria (all with GINI coefficient higher than 30%). On the other hand, countries with most equal income distribution are: Slovenia, Czech Republic and Slovak Republic (with GINI coefficient equal or lower than 25%)³.

²The GINI coefficient gets values in the interval from 0 to 100, where higher value indicates more unequal distribution of income among individuals (0 value indicates perfect equality, while 100 value indicates perfect inequality or extreme situation when one individual owns 100% of the income in the country).

³The data are taken from the World Indicator Database of the World Bank.

Table 1: Descriptive Statistics for GINI Coefficient in CESEE countries, 2000-2013

Country	Mean	Max.	Min.	Std. Dev.	Obs.
Bulgaria	30.36	35.90	24.00	4.69	14
Croatia	29.60	31.60	27.00	1.51	11
Czech Republic	25.10	26.00	24.60	0.39	10
Estonia	33.49	37.40	30.90	1.89	14
Hungary	26.48	33.30	24.00	2.42	13
Latvia	36.14	38.90	34.00	1.44	10
Lithuania	33.96	37.00	31.00	2.06	11
Poland	31.66	35.60	30.00	1.62	11
Romania	32.60	37.80	29.00	2.57	14
Slovak Republic	25.38	28.10	23.70	1.31	9
Slovenia	23.12	24.40	22.00	0.86	13
All	29.87	38.90	22.00	4.56	130

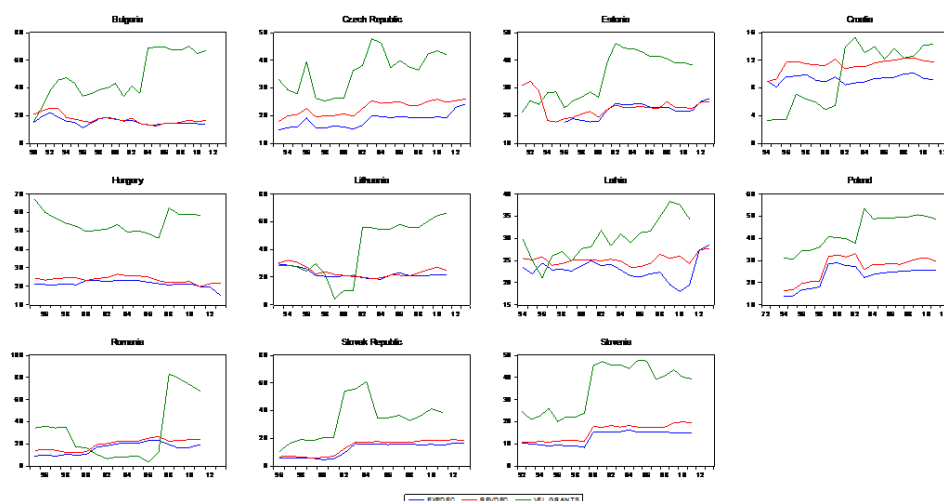
Source: Author's own calculation in Eviews.

According to the World Bank Database, the income distribution was getting more unequal, over the last two decades in: Bulgaria (from 24% in 2000, to 35% in 2013), Romania (from 29% in 2000 to 34% in 2013) and Lithuania (from 31% in 2000 to 37% in 2013). On the other hand, the income distribution was getting more equal in: Estonia (37% in 2004 to 32% in 2013) and Poland (35% in 2005 to 31% in 2013), while in other countries it has been relatively stable over the analyzed period.

Recent trends in fiscal decentralization in Central and Southeastern European countries

The Central and Southeast European countries are post-communist countries that were engaged in dynamic process of decentralization of the public sector, in the last two decades, as a part of their overall democratic and economic reform process. Therefore, the level of decentralization, measured as percentage of local government expenditures of GDP, increased on average, from 8.5% in 1997 to 9.5% in 2013.

Figure 1: Decentralization of expenditures, revenues and fiscal transfers in CESEE countries



Source: Author's own calculation in Eviews.

The figure given above, shows the fiscal decentralization trend in Central and Southeastern European countries. As we can see, fiscal decentralization has increased in average, in the past two decades in all analyzed countries. It is also evident that the level of decentralization of public revenues and expenditures is increasing by relatively stable rate over time, while the level of fiscal transfers has significant upward and downward oscillations. Therefore, in our empirical research in the next section, we employ three different measures of fiscal decentralization, in order to investigate whether the decentralization has different effect on income inequality, based on different models of local governments financing (own local revenues versus fiscal transfers from central government).

The linkage between own local revenues versus fiscal transfers and income inequality

Fiscal decentralization and income inequality can be linked through the regional differences within the countries, due to different levels of economic development of regions, different cultural and demographic characteristics of the regions, etc. Such regional differences

often lead to a greater income disparities between individuals, and accordingly greater disparities in local government's fiscal capacities. Some authors argue that, the impact of fiscal decentralization on income redistribution may depend on how the local governments are financed. When local governments are mostly financed by own source of revenues, decentralization of government revenues will probably cause greater income inequality among individuals, due to disparities in fiscal capacities of local governments. On the contrary, when local governments are financed by fiscal transfers from the central government, fiscal decentralization is expected to have less distortive effect on income inequality. The reason behind this is that central government is primary responsible for the income redistributive policy and through fiscal transfers to local governments actually contributes to more equal income distribution.

The empirical model, variables and methodology

In this section, we conduct an empirical analysis of the influence of fiscal decentralization on income inequality of individuals, by estimating linear equation model using a cross-section data for 11 countries from Central and Southeastern Europe⁴. The dependant variable is income inequality, measured by the GINI coefficient. According to the definition of the World Bank, GINI coefficient measures the extent to which the distribution of income or consumption expenditure among individuals or households within a country deviates from a perfectly equal distribution. Thus a GINI coefficient of 0 represents perfect equality, while a coefficient of 100 implies perfect inequality⁵.

In order to identify whether decentralization has different effects on income inequality, according to different models of financing of local authorities, we employ three different measures for fiscal decentralization: the decentralization of government expenditure (share of local expenditure in total government expenditure); decentralization of government revenues (share of local revenues in total government

⁴The sample includes: Bulgaria (1990-2013), Estonia (1991-2013), Latvia (1994-2013), Lithuania (1993-2013), Poland (1994-2013), Romania (1995 -2013), Slovakia (1996-2013), Slovenia (1992-2013), Hungary (1995-2013), Croatia (1994-2013) and the Czech Republic (1993-2013).

⁵The data are available at: <http://data.worldbank.org/indicator>

revenues) and vertical fiscal imbalance (share of fiscal transfers from the central government in total revenues of local governments). The data are obtained from the OECD Fiscal Decentralization Database.

Further, we take into account the size of the public sector of the country, measured as the share of general government expenditure in GDP. As previously discussed, the government expenditures are expected to have a negative impact on GINI coefficient, i.e. governments through social transfers programs contribute to reduction of income inequality among individuals, hence countries with greater public sector are expected to have more equal income redistribution and lower GINI coefficient.

Other control variables that are included in the regression model are: unemployment rate (national estimations), openness of the economy (the share of imports and exports in the country's GDP), urbanization (the share of urban population in total population) and dependency (the age dependency ratio as defined by World Bank⁶).

The table 3 and 4 in the appendix, provide a detailed description of the variables used in the regression model and the coefficients of correlation.

The Kuznet's Hypothesis

According to Kuznets (1955), economic growth initially leads to greater income inequality in the country, because the benefits of the development at the beginning are felt only by the higher-income group of individuals, but in the second stage, after the level of development reaches a certain point, the benefits of the growth become available to the lower-income group of individuals and income inequality in the country begins to decline. Accordingly, the Kuznet's Hypothesis assumes that the relation between the level of economic development of the country and income inequality is not linear, but rather has an inverted „U“ shape. Therefore in the regression model, we also test the quadratic relationship between the level of economic development of the country, measured by the level of GDP per capita and the level of income inequality. Finally, as Sepulveda and Martinez - Vazquez (2011) pointed out, the income levels

⁶Age dependency ratio is the ratio of dependent population (individuals younger than 15 years or older than 64 years) to the working age population (individuals at age from 15 to 64).

in countries are correlated with other factors, such as: strength and quality of institutions, rule of law, development of the financial sector, etc., and therefore, by using the log of GDP per capita, as control variable, it is possible to cover several other socio-economic factors and their influence to the dependant variable in the model.

In accordance with previous empirical studies, to test the direction and significance of the potential effects of fiscal decentralization on income inequality, the following empirical model is employed:

$$\begin{aligned} \text{Income_inequality}_i &= \alpha_i + \beta_1 \text{decentralization}_i + \beta_2 \text{public_sector_size}_i \\ &+ \beta_3 \text{economic_development}_i + \beta_4 \text{openness}_i \\ &+ \beta_5 \text{unemployment}_i + \beta_6 \text{urbanization}_i \\ &+ \beta_7 \text{dependancy}_i + u_i \end{aligned}$$

where, all the variables are as previously defined and u is an error term. The data set consists of two decades averages for 11 countries of Central and Southeastern Europe. The estimation technique is ordinary least squares, and to correct for heteroskedasticity, the White cross section weights are employed. All calculations are made in Eviews.

The estimation results

The following table summarizes the estimation results for income inequality. The positive and statistically significant coefficients of all of the three employed measures of fiscal decentralization indicate that, the fiscal decentralization worsens the income inequality in Central and Southeastern European countries. In other words, transferring one unit (percentage point) of government revenues and expenditures from central to local level of government increases the GINI coefficient by approximately 0.4 units (percentage points).

Table 2: Estimation results

Dependant variable: Gini coefficient					
Independent variables:	CESEE Countries				
	(1)	(2)	(3)	(4)	(5)
Expenditure decentralization	0.423 *** 0.052	0.420 ** 0.064			
Revenue decentralization			0.420 *** 0.051	0.434 ** 0.065	
Intergovernmental transfers					0.199 * 0.083
Log GDPpc const prices	1.547 ** 0.414	4.222 11.526	1.453 * 0.548	-10.839 12.758	9.022 * 3.334
Log (GDPpc const prices) ^ 2		-0.155 0.669		0.711 0.741	
Government expenditures	-0.567 *** 0.044	-0.564 ** 0.061	-0.562 *** 0.059	-0.574 ** 0.062	-1.096 ** 0.265
Unemployment	0.388 *** 0.051	0.383 ** 0.074	0.457 *** 0.057	0.484 ** 0.080	0.649 * 0.208
Urban population	-0.051 ** 0.016	-0.052 0.021	-0.077 ** 0.023	-0.075 * 0.024	0.114 * 0.044
Dependant population	0.500 *** 0.075	0.493 ** 0.096	0.600 *** 0.084	0.634 ** 0.101	0.806 ** 0.206
Openness	-0.041 ** 0.009	-0.040 * 0.011	-0.027 * 0.010	-0.029 0.011	-0.098 ** 0.027
Constant	12.311 5.520	1.126 48.955	6.752 6.877	58.003 53.958	-53.770 29.745
R-squared adjusted	0.980	0.970	0.971	0.979	0.893
F-statistic	70.318 ***	41.159 **	42.421 **	68.023 ***	12.960 **
Durbin-Watson statistics	1.769	1.782	1.778	1.951	2.419
Period	1990-2013	1990-2013	1990-2013	1990-2013	1990-2013
Cross - section	11	11	11	11	11

Note: The White heteroskedasticity consistent standard errors are given below coefficients.

* 10% level significance, ** 5% level significance, *** 1% level significance.

Regression model (5) indicates that, when fiscal decentralization is implemented by increasing the fiscal transfers from central to local governments, the effect on income inequality is smaller. When fiscal transfer's share in total local revenues increases by one unit (percentage point), GINI coefficient is increased by approximately 0.2 units (percentage points). The public sector size has a statistical significant negative effect on income inequality in all regressions. The government expenditures, as previously expected, reduce the GINI coefficient (the bigger the public sector size, the lower the GINI coefficient, as a result of the redistributive income policy of the central governments).

The level of economic development, measured as the log of GDP per capita, worsens the income inequality, meaning that when the level of GDP per capita is increasing by one percent, the income inequality measured by the GINI coefficient is increasing by 1.5 units (percentage points). The coefficient of the quadratic term of the log of GDP per capita, in the regression models (2) and (4) didn't turn out to be statistical significant. Thus, we failed to find evidence of the Kuznet's Hypothesis, probably because of the relatively short time series employed in the model.

Other statistically significant variables that contribute to greater income inequality, as previously expected, are the unemployment rate and the age dependency ratio. On the other hand, the variables that have statistically significant negative impact on income inequality are: urbanization and the openness of the economy.

Conclusion

This paper investigates the potential negative effect of fiscal decentralization on income redistribution among individuals in Central and Southeastern European countries.

According to the classical theory of fiscal federalism (Musgrave, 1959), the income redistribution policy along with the macroeconomic stabilization policy are better pursued by the central government than by local governments. However, it does not mean that fiscal decentralization does not affect the income redistribution between individuals and regions within a countries.

The results from the cross country analysis in this paper indicate that fiscal decentralization leads to a greater income inequality in Central and Southeastern European countries. These findings are consistent with the most of the previous studies that fiscal decentralization worsens the income distribution among individuals in the countries (Qiao et al. (2008), Sepulveda and Martinez - Vazquez (2011), Sacchi and Salotti (2014), etc.). However, the impact on inequality is smaller when local governments are financed in greater extend by fiscal transfers from central government than by own local sources of revenues.

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APENDIX

Table 3: Variables, description and sources

Variable	Description	Source
Income inequality	GINI coefficient.	World Bank Indicators Database
Expenditures Decentralization	Local government expenditures as % of general government expenditures.	OECD fiscal decentralization database
Revenues Decentralization	Local government revenues as % of general government revenues.	OECD fiscal decentralization database
Vertical fiscal imbalance	Central government transfers as % of local government revenues.	OECD fiscal decentralization database
Government expenditures	General Government expenditures as % of GDP.	IMF World Economic Outlook Database
Log GDP p.c.	Log of GDP per person expressed in \$ (constant prices 2005).	World Bank Indicators Database
Unemployment	Unemployed as % of total labor force (national estimate).	World Bank Indicators Database
Openness	Sum of exports and imports as % of GDP.	World Bank Indicators Database
Urban population	Urban population as % of total population.	World Bank Indicators Database
Dependant population	Population ages 0-14 and above 65 as a % of the working age population.	World Bank Indicators Database

Table 4: The correlation coefficients

	GINI Coefficient	Expenditures decentralization	Revenues decentralization	Intergovernmental transfers	Government expenditures	GDP pc (constant prices)	Unemployment	Openness	Urbanization	Dependant population
GINI Coefficient	1.00	0.58	0.50	-0.06	-0.76	-0.77	0.39	-0.30	0.28	0.70
Expenditures decentralization	0.58	1.00	0.98	0.47	-0.16	-0.31	0.05	0.02	0.66	0.28
Revenues decentralization	0.50	0.98	1.00	0.49	-0.06	-0.27	-0.04	-0.08	0.64	0.19
Intergovernmental transfers	-0.06	0.47	0.49	1.00	0.25	-0.23	-0.14	0.04	0.31	-0.04
Government expenditures	-0.76	-0.16	-0.06	0.25	1.00	0.66	-0.25	-0.02	-0.15	-0.52
GDP pc (constant prices)	-0.77	-0.31	-0.27	-0.23	0.66	1.00	-0.38	0.40	-0.30	-0.67
Unemployment	0.39	0.05	-0.04	-0.14	-0.25	-0.38	1.00	-0.03	0.06	-0.02
Openness	-0.30	0.02	-0.08	0.04	-0.02	0.40	-0.03	1.00	0.30	-0.25
Urbanization	0.28	0.66	0.64	0.31	-0.15	-0.30	0.06	0.30	1.00	0.22
Dependant population	0.70	0.28	0.19	-0.04	-0.52	-0.67	-0.02	-0.25	0.22	1.00

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Original scientific paper

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**ASSESSING TOURISM DEVELOPMENT: THE CASE OF
KRUSHEVO, MACEDONIA**

Abstract

Tourism in Macedonia emerged as a major factor for regional and overall economic development, which can trigger growth and prosperity. However, some guidelines for sustainable development must be laid down in order to preserve resources, ensure complementarity between areas and define tourism development. This paper intends to assess the current tourism development, as well as to disentangle potentials for further tourism development of Krushevo, as a famous destination in Macedonia. Moreover, it brings an analyses of major problems and underlying causes, as well as describes the weaknesses that need to be addressed. The focus is put on the major opportunities for improvement, particularly formulating the sector vision of change and the vision of change for products and services, as well as the identified interventions to reach the vision of change. In order to meet the research aims, the quantitative approach is mainly used, by conducting a survey among four target groups, thus covering the demand and supply side. The overall conclusion is that the destination has profound limiting factors for tourism development. Therefore, the current marketing strategy needs an improvement in order to overcome the spotted obstacles for destination and product development.

Key words: Tourism; Tourism planning; Regional development; Assessment; Krushevo.

JEL Classification: F63, L83, O21

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Introduction

Tourism is the world's largest industry and it is a major area of interest, not just because of its size in terms of enormous number of travelers, passengers, visitors and tourists, or the size of their consumption, but also because of the enormous impact on the national economies and people's lives. Tourism has proven to be a surprisingly strong and resilient economic activity and a fundamental contributor to the economic recovery by generating billions of dollars in exports and creating millions of jobs. The international tourist arrivals reached 1,138 million in 2014 (a 4.7% increase over 2013), while the number of overnight visitors reached 1,138 million in 2014 (51 million more than in 2013). With an increase of 4.7%, this is the fifth consecutive year of above average growth since the 2009 economic crisis. This has been true for destinations all around the world, but particularly for Europe, as the region struggles to consolidate its way out of one of the worst economic periods in its history. For the upcoming period, an increase of 3% to 4% is forecasted, further contributing to the global economic recovery.

Tourism in Macedonia emerged as a major factor for regional and overall economic development, which can trigger growth and prosperity. The objective of this paper is to assess current stage of tourism development of Krushevo, as a famous tourist destination in Macedonia. In particular, the paper attempts to explore and identify the major problems and weaknesses that need to be addressed. The focus is put on the major opportunities for improvements, particularly formulating the sector vision of change and the vision of change for products and services, as well as the identified interventions to reach the vision of change. The paper is structured in several parts. After the introductory part, the paper is organised as follows: Section 2 provides a brief overview of literature addressing the issue of tourism and regional development. Section 3 provides some stylized facts on current tourism development in Krushevo, by elaborating the regional and local context. Section 4 presents the tourism market map of Krushevo, while Section 5 encompasses the analysis, results and discussion of the research. Future challenges and recommendations are presented in the final section.

1. Literature review

The concept of regional development on one hand includes the dynamics of development of specific areas, primarily understood as a regional economic development of those areas, but also regional traffic, population or environmental development. There is a large body of literature where the main thesis is grounded on the fact that regional development must be based on the exploitation of the best potentials of the regions' environmental features, and sustainable development must be based on reasonable regional development.

In this respect, the conventional view on the relationship between tourism and regional development is present in many studies (Sharpley & Telfer, 2002; Rayan, 2010; Stabler et al, 2010). Other researchers investigate the local, place-based factors that influence tourism development, and raise the question why some tourism areas develop more than others (Raina & Agarwal, 2004). Likewise, a focus is put specifically on the less developed world and by posing many assumptions about the role of tourism in development and, in particular, highlighting the dilemmas faced by destinations seeking to achieve development through tourism (Huybers, 2007; Telfer & Sharpley, 2008). Some authors even endeavor to a critical approach within a multi-disciplinary framework to relook at the complex phenomenon of tourism development (Babu et al, 2008; Ramos & Jimenez, 2008).

Tourism has seen as a 'sunrise' industry that is labor intensive, and therefore, it offers the potential to be a substantial source of employment. In short, much attention has been directed towards the economic potentials of the tourism. Due to the relationship between food and tourism, some authors underscore the significant opportunity for product development as a mean of rural diversification (Bessière, 1998). Others examine the contemporary issues and reasons for tourism development as a strategy for urban revitalization (Pearce & Butler, 2002) as well as for providing the basis for a better informed integration of tourism in regional development strategies (Sharma, 2004). Moreover, some discussions are towards various policy innovations as activities by regions in terms of tourism development, considering continuous growth within the sector (Giaoutzi & Nijkamp, 2006). Additionally, as tourism and regional development are closely linked, regions and local authorities play a key role in the formulation of policy and the organization and development of tourism (Constantin, 2000).

2. Snapshot on tourism development in Krushevo

Krushevo is a municipality located in the south-west part of Macedonia within the Pelagonia Region (Figure 1). It is situated at an altitude of over 1,350m above the sea level, being a mountainous town with the highest altitude in the Balkans.

Figure 1: Map of Macedonia with marked Pelagonia region and Krushevo

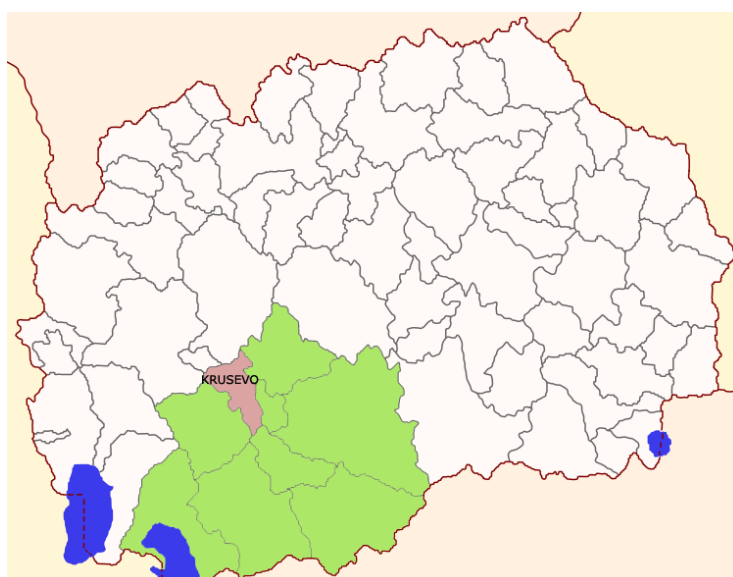


Table 1 presents the basic demographic data for Krushevo, Pelagonia region and Macedonia. The main aim is to locate the position of Krushevo within the Pelagonia region, and simultaneously identify the place of the Pelagonia region within the frames of Macedonia. According to the last estimation of the State Statistical Office regarding the population (data as of 30.06.2013) of the Pelagonia region, it has 232,367 inhabitants representing 11.3% of total population living in Macedonia. With a surface of 4,713 km² (18% of total surface of Macedonia), the Pelagonia region has the lowest density of all the regions in Macedonia of only 49.3 inhabitants/km². According to the gender structure of the population, the Pelagonia region has almost an ideal gender balance. It encompasses 11% of male and 12% of female population of Macedonia, and 11.3% of the working age population at national level.

Table 1: Basic demographic indicators for destination Krushevo, Pelagonia region and Macedonia

	Surface (km ²)	Population	Gender structure		Working age population
			Male	Female	
Krushevo*	191	9,684	4,918	4,766	3,706
Pelagonia Region**	4,713	232,367	116,392	115,975	189,136
Macedonia***	25,713	2,064,032	1,033,990	1,030,042	956,057

Note:

* Data for 2010.

** Data estimated as at 30.06.2013, State Statistical Office of the Republic of Macedonia (2014a), Regions of the Republic of Macedonia 2014, Skopje.

*** Data according to the census 2002.

Krushevo encompasses only 4.1% of the surface of the Pelagonia region and 4.2% of the total population of Pelagonia region with a density of 50.7 inhabitants/km². Compared to the Pelagonia region, it encompasses 4.2% of male population and 4.1% of female population. Regarding the gender structure of the destination, one may conclude that it has almost ideal gender balance (50.8% male and 49.2% female population).

Another specific feature of the destination is the high unemployment rate. Out of 3,706 total working population in the destination, only 1,848 are employed, out of which only 28.8% are women. In this line, the unemployment rate of the destination is 50.1%, which is far above the average of the Pelagonia region (22.2%) and from the national average (29%). On long-term basis, the unemployment rate, as a percent of the total unemployed population, is estimated at 89.5%. This leads to employment rate of only 29.9%, which is almost twice lower than the average of the Pelagonia region (50.1%) and the national average (40.6%). The employment rate in services, as a percent of the total employment, is 46.6%.

Analyses of the tourism sector data show that the total number of employees in accommodation and food service activities in Macedonia in 2013 was 18,225. The average net wage in the field of accommodation and food services activities in 2013 is 15,294 MKD (Macedonian denars) (State Statistical Office, 2014b: 38), which is significantly less than the average net wage (19,804 MKD) in the Pelagonia region for 2013 (State

Statistical Office, 2014a: 116). At national level, women are participating with 28.4% in the total number of employed (State Statistical Office, 2014c: 70).

2.1. Regional context

The regional context includes data specifics for the Pelagonia region. Concerning the tourism statistics for the region, one may note that it encompasses a constant share in the national market, in terms of rooms and beds within the accommodation facilities. Moreover, in 2013, the Pelagonia region had 3,322 rooms, which is 12.4% of total rooms in Macedonia, and 10,001 beds, representing 14.2% of all beds at national level. Referring to tourism statistics in terms of arrivals and nights spent, the region has very modest portion of the national market. Namely, in 2013, 70,312 tourists visited the region, which represents 10% of total tourists visiting Macedonia. Almost three-quarters (49,635) are domestic tourists, thus representing 16.4% of domestic tourists visiting Macedonia. Only one-quarter of the tourists that visited this region are foreign tourists (20,677), which is only 5.2% of total foreigners at national level. In 2013, the region had 162,752 registered overnights, representing 7.5% of Macedonia's total overnights. In this line, 112,637 are overnights by domestic tourists, which is 8.8% of the national tourism market. The foreign visitors have 50,115 registered overnights, which is only 5.7% of national tourism market. The average length of stay in the Pelagonia region is 2.3 days for all tourists (lower than the average length of stay in Macedonia - 3.1 day), whereas, the domestic tourists stay as long as the foreigners - 2.3 days.

Based on the facts given above, one may draw a line that Pelagonia region does not have the potential for regional development through tourism in terms of basic tourism infrastructure.

2.2. Local context

Concerning tourism statistics of Krushevo within the regional context, one may find interesting conclusions. It is noticeable that the strong and dominant position of the destination within the regional frames is stressed only in terms of domestic tourists, who are almost ten times more, than the foreigners. The destination encompasses nearly half of the total tourist arrivals coming to the Pelagonia region (55.1%),

whereas 74.1% of the total domestic arrivals (36,799) and only 9.5% of the total foreign arrivals (1,969). In the same line, the destination encompasses half of the total nights spent in the region (54.9%), whereas 72.1% are overnights of domestic tourists (81,184) and 16.3% are overnights of foreign tourists (8,147). However, one must note that the above noted figures do not represent the real picture of tourism statistics. The problems are located within the private accommodation facilities, where it is often a case when the guests are not registered, or the guests are registered, but their overnight is not registered, or even the worst case scenario, when the room-renters are not registered as official tourist subjects within the local tourism market. Therefore, a large part of more than 200 private accommodation facilities with approximately 1,300 beds are in a process of categorization. The situation is clear with the hotel accommodation capacities, where within three hotels, there are 422 beds, and additional 150 beds in the Youth dormitory "Shula Mina". The food and beverage capacities have approximately 800 seats.

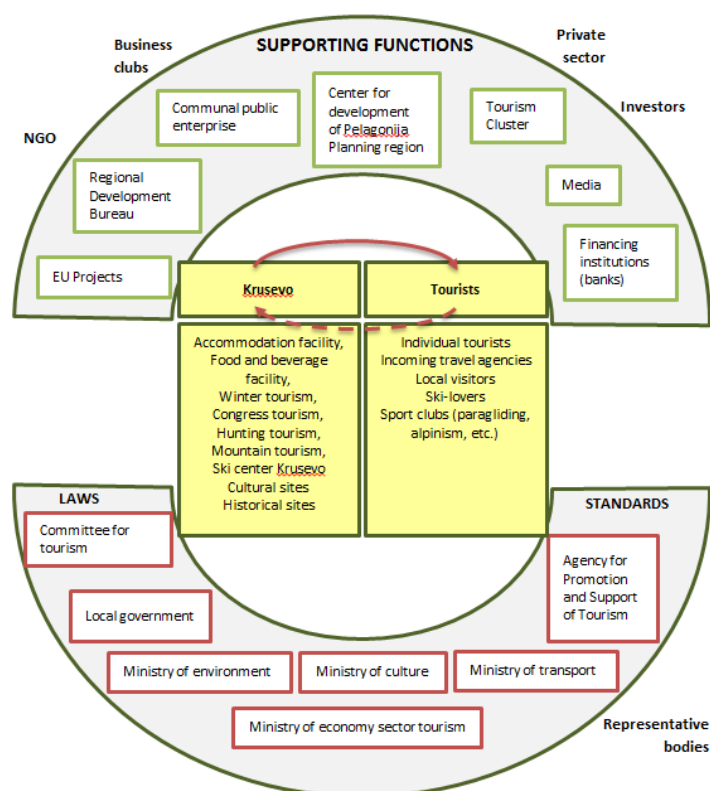
Interesting remarks may be driven in terms of the average length of stay in Krushevo. In this line, the total number of tourists who visit the destination stay in average for 2.3 days, which is exactly as the average length of stay in the Pelagonia region. Yet, one must underline notable differences in the length of stay among domestic and foreign tourists. Domestic tourists stay in average for 2.2 days (the same as the average of the region). This is almost two times lower compared to the average of foreign tourists who stay for 4.1 days (higher than the region and national average as well).

3. Tourism market overview of Krushevo

The local economic development of Krushevo during the transition process was faced with enormous negative changes. The business entities were not capable to positively complete the process of privatization, so they were closed, leading to huge unemployment rate at that time. Today, the available resources, as well as the potential opportunities for supporting local economic development are limited. The local self-government (LSG) supports various initiatives in terms of organizing events, thus contributing to diversified tourism supply. At the same time, through donor-funded projects, several strategic documents at local level were adopted (Local Action Plan for Employment, Strategy

for Local Development, Strategy for Tourism Development of Krushevo 2009-2013 and Local Ecological Action Plan). In all of them, the T&H sector was identified as the most important for the destination's development. Supplemented with the handicrafts, rural development, ecology and culture as additional strategic areas, further economic development of the destination was planned. According to the new Law on Tourism Development Zones, one zone was foreseen for the destination Krushevo. Currently, the project is still in its first phase, where the project documentation is being prepared. For the period up to 2017, it is planned that mini hotels and small accommodation facilities are built, as well as a weekend settlement.

Figure 2: Sector map of Krushevo, M4P methodology



The key providers of tourism services in Krushevo are the established networks of supply chain as well as LSG, NGO sector, formal and informal education providers and the Center for development of the Pelagonia planning region. By applying the Making Markets Work for the Poor (M4P) methodology, the sector map of Krushevo is given on Figure 2, which is hugely comprehensive. Many of the supporting functions currently present at the destination may be used in the line of supporting and enhancing sustainable development.

Generally, all tourism activities are driven by the actors from local, regional and central level. The LSG along with the Ministry of Culture supports various initiatives in terms of organizing festivals, cultural events and art exhibitions (“Krushevo Ethno town”, “10 Days of the Republic of Krushevo”, “Krushevo cuisine” etc.). The municipality of Krushevo, through donor-funded projects, adopted several strategic documents at local level (Local Action Plan for Employment, Strategy for Local Development, Strategy for Tourism Development of Krushevo 2009-2013, Local Ecological Action Plan). The Agency for promotion and support of tourism in the Republic of Macedonia contributes to destination’s development by providing subventions for each attracted guest from abroad, as well as assistance for ski center development. The Ministry of Economy launched a project for private households’ categorization in terms of supporting tourism development of the destination. The Center for development of the Pelagonia planning region makes efforts for raising awareness and funds for developing tourism in the destination. The intention is to combine winter and alternative tourism and create a complex and unique tourism product. Yet, the general conclusion is that there is lack of coordination among the key market players.

4. Analysis, results and discussion

For the purpose of the research outcome, a field survey was conducted during the period 11-19 July, 2014. It included a quantitative approach by introducing a factor analysis. The data were collected by four types of tailor-made self-administered questionnaires and processed with SPSS. They were distributed in Krushevo with an overall response rate of 66.7%, while the rest of the questionnaires were incomplete and

unusable. Four target groups were surveyed with the following details on descriptive statistics:

- Target group 1: Managers/owners and employees in travel agencies. This target group encompasses 5.6% of all respondents. Due to the fact that Krushevo has only one travel agency (TA Arbo Travel), only one respondent was surveyed. The respondent has the following demographic characteristics: by working position – manager (at the same time owner and an employee); by gender – female; by nationality – Vlah; by age – 47 years;
- Target group 2: Managers/owners and employees in service facilities. This target group encompasses 33.3% of all respondents. The sample for this target group consists of restaurants - 83% and other type of food service facilities, 17% accommodation facilities. According to the working position of the respondents, the structure is: owners 67% and employees 33%. According to the gender, 83% of the respondents are male, and 17% are female. By nationality, they are all Macedonians with an average age of 36 years;
- Target group 3: Tourists. This target group encompasses 22.2% of all respondents. According to gender, 75% of the respondents are male and 25% are female. The majority of respondents (75%) are Macedonians (domestic tourists) and 25% are foreign tourists. They are all between 15-29 years of age; and
- Target group 4: Residents. This target group encompasses 38.9% of all respondents. According to gender, 86% are male and 14% are female. According to nationality, 86% are Macedonians and 14% are Vlachs. The majority of the respondents (71%) have higher education. According to the age structure, 57% are between 15-29 years and 43% are between 30-64 years.

4.1. Problems and underlying causes

Based on the field survey, several problems which could be considered as very large obstacles for tourism development of Krushevo were revealed.

The highest limitations for development of tourism supply facilities are noted according to the perception of the surveyed respondents. The owners/managers identify the access to finance as one of the top 3 limitations to the facilities' development. Besides this, the

insufficient knowledge and skills of employees, as well as the lack of cooperation with LSG are identified as the most powerful limiting factors. On the other hand, the surveyed employees in service facilities find the insufficient promotion at foreign markets, unfavorable legislation, as well as the bad economic situation in the country as the strongest barriers for their business performance. Due to the fact that tourism sector is labor intensive, an effort must be made to find qualified and skilled workers in the destination. On one hand, Krushevo has the highest unemployment rate (50.1%) within the region, but on the other hand finding qualified work force is not easy. Because of the job specifics and lack of skilled workforce, almost all tourism suppliers offer free training to their employees. The service facilities do not cooperate neither with domestic tourist agencies nor with foreign tour-operators. The lack of intermediaries in the line of increasing the market is a profound obstacle in a destination's development. Generally, no one from the supply side receives subsidies from the state. All tourism market players on the supply side agree that the LSG is not contributing enough in the line of increasing the number of guests in Krushevo. The respondents fully agree that the indifference of local officials is a very large obstacle in a destination's development.

As the most important elements that need to be addressed in line of improving the tourism development in Krushevo is the improvement of the existing accommodation facilities, followed by improving the knowledge and behavior of the employees in tourism. The need of introducing new marketing strategy, as well as establishing better coordination with the LSG is also noted as the 'hot-spots' with negative reflection.

Concerning the demand side, one may also find interesting notes. Only 20% of the visitors are foreign tourists, which lead to very modest multiplier effect in the sector. Generally, the foreign tourists come from the neighboring countries (Greece, Serbia, Bulgaria, Albania and Kosovo). The surveyed tourists identified several items in terms of missing elements on the supply side. While the domestic tourists miss cultural events as number-one item, the foreigners ranked the historical and archeological sites as the most important. Yet, both types of tourists miss natural beauties, as well as churches and monasteries regarding sightseeing activities. The traditional food is ranked as the least important in the missing list of tourism demand side, meaning that the gastronomy and production of local food is a strong side of tourism supply. Yet,

besides the problems which the destination is facing, the tourists get what they pay for, and are willing to return again and recommend the destination to others.

4.2. Core Value Chain

Upon the detailed field survey, it may be concluded that there is a presence of many challenges the destination is facing.

Tourism facilities generally are not star ranked, although being fully aware that the star-classification assists in attracting guests. Some of the service facilities are fresh on the market (up to 5 years of existence), but some have 10-15 years of experience, and an approximate yearly income in the last 2 years of up to 50,000 EUR. They are mostly small business entities (ranging from 1-8 employees). The vast majority of the employees (84%) have secondary education, and it is very rare to have employees with higher education. The number of employees with primary education, or without any degree of education is extremely small. The surveyed managers and/or owners of the accommodation and food service facilities expect an increase of the number of employees after 5 years of approximately 30%.

There is only one travel agency in Krushevo (TA Arbo Travel), managed by a female owner (employee at the same time). The agency possesses a working license type A, has five years of experience with an approximate yearly income in the last 2 years of up to 50,000 EUR. It makes arrangements for Macedonia and neighboring countries, with an average price of the most selling arrangement of up to 200 EUR. The service facilities as tourism suppliers promote their facilities and packages by using the Internet (web sites), the social networks (Facebook, Twitter and similar) and the printed media as marketing channels for promotion. Yet, they do not apply TV advertising, nor billboards and e-mails (direct selling) as marketing channels. Opposite of them, the travel agencies only use the Internet as a media for promotion and do not apply other marketing channels. Since one may expect that the contemporary modern tourists like to be informed about the destination prior to the arrival, it is necessary to develop integrated website for the destination.

The domestic tourists, coming from other places different from Skopje, are dominant in the destination. The small number of foreign tourists (only 5% in 2010) come from different countries, and stay in

average for almost twice longer than the domestic tourists do. Holiday is the main purpose of visit and in that case, the tourists stay even longer than three days. In case of being day-trippers, the purpose of visit is fun. The average daily expenditure is less than 30 EUR for food and for fun, pointing to low economic effect for the destination. The tourists travel by self-organizing trips and generally reach the destination by car or by public transport. The destination does not have a rent-a-car agency. Generally, the tourists inform themselves prior to the arrival in the destination using the Internet as medium. In case of being accommodated in private rooms, they pay the tourist tax of 0.7 EUR per night. The surveyed tourists responded that it is their priority to have good accommodation during the stay, while the hygiene and the fun elements are second ranked. The price of a tourist package is the most influencing determinant when making decision for staying in the destination. The tourists are not willing to pay 15 EUR for obtaining a card for 10-15% discount in all hotels, restaurants and museums in the destination if they stay 3 or 5 days. Only in case of staying 7 or more days, the tourists (only foreign ones!) are willing to pay for this kind of service. The overall perception of both types of tourists that the prices are acceptable encourages additional service expenditure for food, shopping and fun.

The local community perceives tourism as the most important sector for development and prosperity of the destination. The surveyed residents fully agree that the destination has potential to be developed into a tourist sight if the road infrastructure is improved and the tourism supply is enriched. They are fully ready to be involved as volunteers in organizing events for promotion of the destination (sports events in first place, and then forums for promoting tourism development).

For the development of the destination in terms of tourism, the main “season” is winter due to the natural preconditions. The utilization of the capacity within the season is estimated to 60-70%, while out of season the utilization is 20-30%. Being aware of the negative effects of the seasonality on the tourism business, tourism market players take measures and activities for overcoming it, but with modest and limited results. The destination identifies with the winter tourism, mostly based on the usage of the ski center – Krushevo. A very small portion of the “tourism” cake is obtained from congress and mountain tourism. Despite the opportunities for the destination’s development by application of alternative tourism, no significant results are noted so far.

Conclusion

When drawing conclusions from the surveyed respondents on the supply side, Krushevo offers relatively good transport and tourism infrastructure (road conditions to reach the place, well-marked tourist attractions, easily accessible tourist locations, and a tourist information office). The demand side confirms this as well. The destination provides various additional services necessary for a pleasant and safe stay, like public parking plots, police patrol, fire-fighting units, emergency health care unit operational 24 hours, clean public areas, waste disposal plots, petrol stations offering all types of fuels (gas, petrol and diesel), as well as car-mechanics. The only missing spots in this line is the lack of regular public buses/van transportation to and from the destination, and the absence of sufficient number of public toilets.

However, the overall general conclusion of the research is that Krushevo, despite the identified potentials and the current achievements of tourism development, needs to undertake some strategic long-term interventions, like:

- Improvement of knowledge and skills of the employees in the tourism and hospitality sector (working place specialization, foreign languages and team work);
- Capacity building for running tourism and hospitality businesses, with special focus on funding. This intervention is for the tourism market players, employees in the tourism and hospitality sector in general, as well as the local population;
- Raising awareness for necessity of undertaking measures and activities for prolonging the season. Identifying forms for overcoming the negative shocks. This may be addressed by enhancement of the currently modest and limited tourism promotion of the destination by developing and introducing new intelligent and sophisticated approaches (mobile applications, quick-response tourism codes, tourism recommendations systems etc.).

Concerning the vision of change for services, a three-fold improvement is a must: (i) to improve current accommodation facilities as well as the road and tourism infrastructure; (ii) to improve knowledge and behavior of tourism employees; and (iii) to introduce new innovative approaches for tourism promotion and to create tourism products, events and stories to link the products.

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Original scientific paper

Zarko MARKOSKI¹⁾

THE DEGREE OF OPENNESS OF THE MACEDONIAN ECONOMY AND THE GROWTH OF THE GROSS DOMESTIC PRODUCT

Abstract

The Macedonian economy has faced different rates of growth of the gross domestic product, influenced by various internal and external factors.

According to new theories, because of the imperfect competition in international trade, it has been shown that the growth of the rate of the gross domestic product in the long run depends on the degree of openness of an economy.

To show the impact of the degree of openness of the economy on the growth rate of the gross domestic product in the Republic of Macedonia in the long run, using linear regression and correlation coefficient, a bi-variant analysis is conducted of the temporal series of the data for the growth rate of the GDP and the data about the degree of openness of the Macedonian economy in the period from 2003 till 2013.

According to the results of the analysis certain conclusions and recommendations, that can be used to create specific policies regarding a more efficient usage of the factors of production and the creation of competitive products, will be presented.

Keywords: gross domestic product (GDP), economic growth, rate of GDP growth, degree of openness of the economy.

JEL classification: E;E2

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Introduction

The economies in the world, including the Macedonian economy, are facing different rates of growth of the real gross domestic product² (GDP). The GDP growth rate is usually presented annually, and it is essential for the functioning of the economy and economic development of a country, thus presenting a challenge for a number of economists.

The rate of growth is affected by several factors which are divided into three groups i.e. factors on the supply side, factors of the demand and the factor - efficiency. However, there are other factors that affect the rate of growth of the GDP as follows: income distribution, degree of openness of the economy to international trade, macroeconomic stability, structural changes, financial inter-mediation, political and social conditions, information technology and so on.

The new theories of economic growth include technological progress and suggest that economic policies are focused on constantly and permanently increasing investment, exploring new ideas to increase the knowledge in the economy and investment in human capital by increasing the growth rate of the output per employee. These economic policies lead to technological progress and contribute to the growth of the GDP in the long run. Also, due to the imperfect competition in the international trade, it is evident that the openness of the economy to international trade can generate real GDP growth in the long term. Considering the fact that the Macedonian Economy is a small and open to foreign investment, this scientific paper treats the degree of openness of the economy to foreign countries and its impact on the GDP.

1. Theoretical review of factors of GDP growth

The real GDP growth is measured by the rate of growth which is calculated by the following formula: $\frac{Y_t - Y_{t-1}}{Y_{t-1}} * 100$, where Y_t is the real GDP of the current year, and Y_{t-1} is the real GDP of the previous year. The factors affecting economic growth are divided into three groups³:

² Gross Domestic Product (GDP): is the total value of all goods and services produced in a country during a year.

³ Source: McConnell, S., and Brue, S., (2005): Economics, McGraw-Hill, p.310.

- Supply side factors
- Demand factors and
- The efficiency factor

The supply side factors allow increase of the production capacity or the production opportunities that impact the GDP. These factors include: a number of production factors such as labor, physical capital and land (natural resources), the quality of the production factors and the technological knowledge. These factors are a prerequisite for the economic growth of a country, the quality of the production factors is measured by the productivity, ie, the amount of products that can be produced by a unit of a production factor per unit of time. By increasing the knowledge and the skills of the workers production capacity can be expanded and it also influences the growth of the living standards of the population.

On the other hand, the technological knowledge through investment in research and development, contributes to an improvement of the productivity at a fixed level of production factors. The technological knowledge concerns the best means of production. The demand factors allow full utilization of the production factors, i.e. households, firms, and the state sector abroad, should be able to buy the increased production.

The efficiency factor refers to the efficiency with which the available production factors are utilized. There is a production efficiency, which means that the factors of production are utilized with the least losses and allocated efficiency, which means allocating the factors of production to produce a variety of products that maximize utilization. Thus, it is noted that in order to achieve a higher rate of GDP growth, there needs to be an efficient utilization of the production factors.

The real GDP growth is determined by other factors such as: the distribution of income, the degree of openness of the economy towards the foreign trade, the macroeconomic stability, the structural changes, the financial inter-mediation, political and social conditions, information technology and so on.

The inequality of income distribution adversely affects the overall satisfaction of the consumers, but on the other hand it generates higher efficiency of the economy. The quality of life of the people is determined by the equality of the income distribution, and the success of the economy depends on the efficiency. The degree of openness of the economy towards foreign trade influences and generates real GDP

growth. The structure of the economy is the participation of certain sectors, such as agriculture, industry and the service sectors, in the GDP. The structural changes affect the economic growth through changes in the structure of the demand and changes in the productivity of the labor in certain sectors. The political and social conditions i.e. the type of political system in the country, the degree of political and economic stability and the degree of economic freedom are important factors that affect the economic growth of the country. On one hand, the political instability threatens directly the ownership rights and has a negative effect on the economic growth and on the other hand, the low level of economic growth increases the political instability in the country.

Information technology impacts the productivity and the economic growth. Advances in the information technology provide faster and cheaper transfer of information to end users, business is about making better investment and other decisions.

2. The way of conducting the research

The relationship between the degree of openness of the economy and the growth rate of the GDP in modern literature is treated through the theory of comparative advantage. According to this theory, the specialization in the production of certain products enables increased efficiency in resource usage and an increase of the level of the real GDP per capita, but it does not lead to an increase of the rate of growth of the real GDP in the long run.

Contrary to that, new theories suggest that the openness of the economy towards foreign trade can generate a real GDP growth in the long term. To show the impact of the degree of openness of the Macedonian economy on the growth rate of the GDP, a survey was conducted using secondary data and relevant literature that treats the research issue. Data has been provided on imports, exports and GDP in the Republic of Macedonia in the period from 2003 till 2013, the relevant sources are the Ministry of Economy, the State Statistical Office and the National Bank of the Republic of Macedonia.

The data analysis is conducted as bi-variate analysis of a temporal series of two variables (the rate of growth of the GDP and the degree of openness of the Macedonian economy), by using simple regression and correlation analysis. By using regression analysis, the impact of one

against the other variables is explained i.e. the influence of the independent variable (the degree of openness of the Macedonian economy) onto the dependent variable (the rate of growth of the GDP). By using a dispersion diagram, the shape and direction of the influence of one of the other variable (with a construction of the regression line) is determined.

The regression line is expressed by the regression equation: $y = a + bx + \varepsilon$, where:

- "y" is dependent variable
- "x" is the independent variable
- "a" is the regression constant, and
- "b" is the coefficient of regression
- "ε" is the random error

A correlation analysis shows the degree of dependence between the variables, i.e. the correlation measures the strength of the already established relationship between the two variables by calculating the correlation coefficient. A calculation of the coefficients of determination and alienation will also be conducted.

The coefficient of determination gives the percentage of influence that the independent variable has on the dependent variable, and the coefficient of alienation gives the percentage of influence of the other factors onto the researched phenomenon.

3. Calculation of the degree of openness of the Macedonian economy and its impact on the growth rate of the GDP

The data given in Table 1 of the Appendix show a calculation of the degree of openness of the Macedonian economy, according to the following formula: **Degree of openness = (Exports + Imports) / GDP.**

Based on these data, a worksheet is prepared, as shown or Table 2., the worksheet is used to construct a dispersion diagram that visualizes the shape of the occurrence, then the regression line is drawn, according to the following formula $y = a + bx$, where "a" is the regression constant and "b" is the coefficient of regression, they determine the direction of the regression line.

Table 2: Data on the GDP growth rate and the degree of openness of the Macedonian economy in the period from 2003 to 2013

n	y (GDP growth rate)	x (degree of openness of the economy)	x ²	y ²	xy
1	2.8	0.77	0.59	7.84	2.15
2	4.6	0.83	0.68	21.16	3.81
3	4.4	0.88	0.77	19.36	3.87
4	5	0.94	0.88	25	4.7
5	6.1	1.06	1.12	37.21	6.46
6	5	1.10	1.21	25	5.5
7	0.9	0.83	0.68	0.81	-0.74
8	2.9	0.82	0.67	8.41	2.38
9	2.8	1.10	1.21	7.84	3.08
10	-0.4	1.09	1.18	0.16	-0.43
11	2.9	1.15	1.32	8.41	3.33
Σ	35.2	10.57	10.31	161.20	34.11

Source: author's calculation

$$\bar{x} = \frac{\sum x}{n} = \frac{10,57}{11} = 0,96 \text{ - Arithmetic mean of the independent variable "x"}$$

$$\bar{y} = \frac{\sum y}{n} = \frac{35,20}{11} = 3,20 \text{ - Arithmetic mean of the dependent variable "y"}$$

$$b = \frac{n \sum xy - \sum x \sum y}{n \sum x^2 - (\sum x)^2} = \frac{11 * 34,11 - 10,57 * 35,2}{11 * 10,31 - 10,57^2} = \frac{3,15}{1,68} = 1,875$$

b = 1,87 – coefficient of regression or bow of the regression line

$$a = \bar{y} - b\bar{x} = 3,2 - 1,87 * 0,96 = 1,4$$

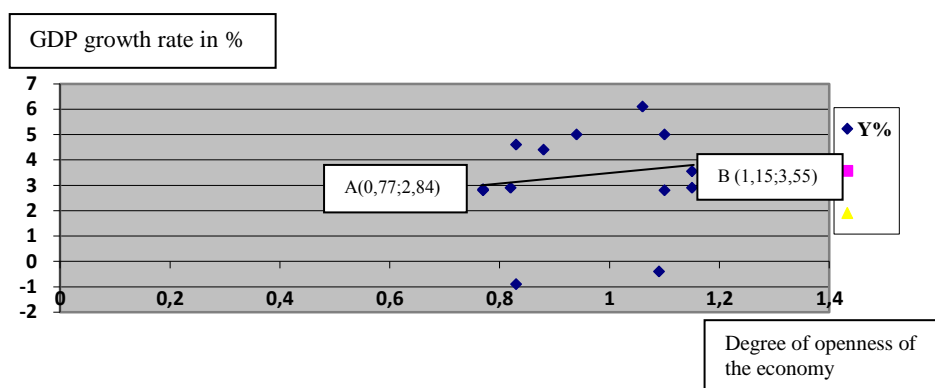
a = 1,4 – regression constant

$$y = 1,4 + 1,87x$$

To construct the regression line, the smallest and largest value for the variable "x" are taken and the values for the variable "y" are determined i.e. we get two points through which the regression line should pass.

That includes: $x_1 = 0,77$ (minimum value) and $x_2 = 1,15$ (highest value), the following values are obtained for y: $y_1 = 1,4 + 1,87 * 0,77 = 2,84$; $y_2 = 1,4 + 1,87 * 1,15 = 3,55$ following the points are obtained: A (0.77, 2.84) and B (1.15; 3.55), through which the regression line is drawn.

Chart 1: The dependence between the rate of growth of the GDP and the degree of openness of the Macedonian economy in the period from 2003 to 2013



Source: Construction of the author by using linear regression

From the dispersion diagram, it can be inferred that in the long term, the degree of openness of the Macedonian economy has influenced the growth rate of the gross domestic product, or the GDP, in the long term it has increased significantly. The data given in Table 2 are used to calculate the Coefficient of correlation i.e. the Pearson correlation coefficient, according to the following statements:

$$r_{xy} = \frac{C_{xy}}{SD_x * SD_y} - \text{Correlation coefficient}^4$$

⁴ The correlation coefficient: a measure of the intensity of the relationship between two variables, it ranges from -1 to 1, it is explained according to the following scale: from -1 to -0.8 a strong negative correlation; from -0.8 to -0.6 an average negative correlation; from -0.6 to -0.3 a weak negative correlation; from -0.3 to 0 and from 0 to 0.3 a negligible correlation; from 0.3 to 0.6 a weak positive correlation; from 0.6 to 0.8 an average correlated and from 0.8 to 1 strong positive correlation.

$$C_{xy} = \frac{\sum xy}{n} - \bar{x}\bar{y} - \text{Covariance}^5$$

$$SD_x = \sqrt{\frac{\sum x^2 - n * \bar{x}^2}{n}} - \text{Standard deviation of the variable}^6 (x)$$

$$SD_y = \sqrt{\frac{\sum y^2 - n * \bar{y}^2}{n}} - \text{Standard deviation of the variable} (y)$$

$$C_{xy} = 0,028; SD_x = 0,131; SD_y = 2,1; r_{xy} = 0,1$$

A coefficient of correlation of 0.1 indicates that there is a negligible correlation between the degree of openness of the economy and the economic growth in the Republic of Macedonia.

By determining the Coefficient of determination $r_{xy}^2 = (0,1)^2 = 0,01$, it can be shown that the degree of openness of the economy influences the increase of the GDP growth rate by only 1%.

By calculating the coefficient of alienation $1 - r_{xy}^2 = 1 - 0,01 = 0,99$, it can be shown that the increase of the GDP growth rate is 99% influenced by other factors.

From the results we can conclude that the degree of openness of the economy affects trade i.e. the exports and the imports and is directly related to comparative advantage⁷, i.e. the trade specialization of the country.

⁵ Co-variance: a common measure of the variability of the two variables.

⁶ The standard deviation of variables: a square root of the variance, i.e. the average square deviation of a series of data mean.

⁷ Gregory Menkju PhD, "Principles of Economics", Skopje, p.53, 2009

Comparative advantage: a comparison between the manufacturers of a product based on their opportunity costs.

4. Conclusion and recommendations

The conclusion is that in the long term, the degree of openness of the Macedonian economy influences the rate of growth of Gross Domestic Product, in the long term the GDP has increased significantly. On the one hand, according to the correlation coefficient, the conclusion is that there is a negligent correlation (weak link) between the degree of openness of the economy and the GDP growth rate. On the other hand, the coefficient of determination shows that the degree of openness of the economy affects the increase of the GDP growth rate by only 1%.

The increase of the GDP growth rate is affected by other factors by 99%. The obtained results show that Republic of Macedonia is oriented in the sectors of low added value, and it affects the export in the world market. Thus, the effect of competition has a negative impact on the Macedonian export, i.e. the price competitiveness of the Macedonian export reduces the export. To confirm this, Table 1 provides data on the relative share that the export and import have in the GDP, from where it can be concluded that the share of exports in the GDP from 28.73% in 2003, increased to 45-50% in 2013, i.e. by 16.77 percentage points, while the share of imports in the GDP from 48.51% in 2003 increased to 70.38% in 2013, i.e. by 21.87 percentage points. The results for the Republic of Macedonia show that there is an insufficient growth of the export compared to the import, i.e. that there is a continuous trade deficit.⁸

To overcome this situation, it is necessary to improve the competitiveness of the products, through the internationalization of the activities of the companies by creating a proactive integrated industrial policy based on knowledge, innovation and research, that leads to growth and development, creation of an investment climate and support for the enterprises.

The state should be involved in promoting the competitiveness and their internationalization, by maintaining proactive policies and their implementation; which will lead to the creation of a favorable and attractive business climate for doing business and attracting foreign investments.

The industrial policy must focus on providing training and education for the managers of the Macedonian companies in the priority

⁸ Trade deficit: means that the exports is negative i.e. the country buys more goods and services from foreign markets, than it buys, and thus creating a trade deficit.

areas; raise the awareness of companies and improve the financial support for encouraging exports. The internationalization of activities of the companies is a key factor for the success of a small economy.

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Appendix

Table 1: GDP by expenditure method at current prices

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
GDP (Y) ⁹ in millions of Euros	4201,12	4430,27	4797,59	5204,21	5934,78	6691,95	6652,03	8122,91	7457,25	7476,24	7058,73
GDP growth rate in% ¹⁰	2,8	4,6	4,4	5,0	6,1	5,0	-0,9	2,9	2,8	-0,4	2,9
Export (X) ¹¹ in millions Euros	1207,1	1345,9	1644,4	1917,5	2477,1	2697,6	1937,0	2534,9	3214,9	3124,0	3211,8
Import (M) ¹² in millions of Euros	2038,2	2354,0	2605,5	2979,7	3833,6	4664,4	3636,8	4137,1	5052,9	5070,6	4968,4
Degree (index) of openness of the economy ¹³	0,77	0,83	0,88	0,94	1,06	1,10	0,83	0,82	1,10	1,09	1,15
(M/Y)% ¹⁴	48,51	53,13	54,30	57,25	64,59	69,70	54,67	50,93	67,76	67,82	70,38
(X/Y)% ¹⁵	28,73	30,38	34,27	36,84	41,73	40,31	29,11	31,20	43,11	41,78	45,50

⁹ Source: State Statistical Office of the Republic of Macedonia, www.stat.gov.mk

¹⁰ Source: National Bank of the Republic of Macedonia, www.nbrm.mk

¹¹ Source: National Bank of the Republic of Macedonia, www.nbrm.mk

¹² Source: National Bank of the Republic of Macedonia, www.nbrm.mk

¹³ Source: author's calculations.

¹⁴ Source: author's calculations.

¹⁵ Source: author's calculations.

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Original scientific paper

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FINANCIAL LIBERALIZATION AND THE FINANCIAL EUROIZATION

Abstract

The issue of financial liberalization is one of the most exploited topics in the late transitioning countries' financial crises discussions. One thing the literature is seeking is what the role of the limited capital movements is. Particularly, does it send a signal to the possible investors that the country has something to hide that in terms of future macroeconomic policies will lead to financial crisis. Along with the debate of financial liberalization, the question on financial euroization is also one important issue regarding emerging or transitioning economies. The debate on euroization is more concentrated on the determinants that in the end conclude that one very important incentive for investors to invest in instruments with foreign currency clause is the monetary credibility. The distrust of the ability for one country to maintain the inflation rate and exchange rate at a stable level merges these two issues (financial liberalization and euroization) in one. The first part of the paper presents two models, discussing the factors that affect domestic agents to invest abroad. The second part elaborates those factors on the case of Macedonia. Throughout the signals the deposit euroization is sending the macroeconomic policies which the paper is concluding that if the models are correct then there is no place for fear of large scale capital outflows in case of financial liberalization.

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Key words: Capital movements, Euroization, Monetary policy credibility, Transition.

JEL classification: C32, E44, E58, F31, F41

Introduction

Cross-border capital movements within the global economy has been increasing steadily for the past decade. One of the reasons for this trend was the increasing global integration in terms of trade, human capital and financial instruments. The dynamics of capital flows between the developed countries is a well known issue. However, we have witnessed that in the recent years these flows between the developing and emerging countries are also increasing. Indeed, the liberalization of the capital flow as a strategy for growth of certain countries was one major factor.

The years that followed after 2002 brought increase in the capital flow from the rich to developing countries. In the year 2008 only, the International Monetary Fund measured a growth in net private capital flows by 30 %. This was supported by strong economic growth, favorable conditions of trade, low inflation and low interest rates worldwide.

Additionally, if we look at the dynamics of the net private flows to developing countries, we can notice that they tend to increase in times when the monetary conditions are favorable (low interest rates). On the other hand, when the risk aversion in the global markets is growing, private flows are declining, (regardless the level of the interest rates). This is especially true for the years when the countries are to be threatened with the major financial crises. Thus, the movements of the international capital markets are primarily driven by the perception of the risk. In fact, these expectations effect the nature of the flows that can be variable. In the end, we can accept the fact that the liberalization of capital flows carries certain risks.

The literature dealing with the liberalization of the transfer of capital concludes that even though there are positive effects from the high amounts of inflow of foreign capital, they can also pose a great threat. After all, the chronology of the financial crises incorporates the variable nature of the movements of international capital. In fact, sudden

stops or retreat of the flows, are one of the reasons for initiation or intensification of negative trends in the economies.

1. Model

1.1. Limited capital flows

In this part, through one simple model we are going to elaborate the motives of the domestic agents to export their savings abroad. At the beginning, we will assume that an economy has economic agents that can invest in domestic assets only. The choice they have is limited with the investments in bank deposits and instruments on the capital market. The period and currency of the deposit are unlimited, but the instruments of the capital market are limited to shares issued by the domestic companies. For simplification of the model, agents are not allowed to invest in voluntary pension schemes, investment funds or life insurance policies. In such conditions, the distribution of assets in the portfolio will be limited to:

$$p_1 = a + d + d^* + s, \dots, (3.1)$$

where p_1 is $f(W, I, DEV)$; a, d, d^* and s are $f(c, i_g, i_t, i_t^*, r_s)$; $t (0,3)$ and,

p_1 - total portfolio of financial instruments,

a - now accounts,

d, d^* - savings accounts (domestic and foreign currency clause),

s - capital market investments-stocks,

W - wealth,

I - income,

DEV - development of the financial markets,

c - macroeconomics policies confidence,

i, i_t^*, i_g - interest paid on savings (domestic and foreign currency clause)

r_s - capital market returns.

Therefore, the choice of investment opportunities is limited to domestic assets. Furthermore, in accordance with their financial capabilities (wealth and income) and the range of available financial instruments, the agents will form their portfolio based on future

expectations of economic trends in their country. The total yield of the portfolio will be set to:

$$r_{p1} = i_g + i + i^* + r_s, \dots, (3.2)$$

$$\text{where } \int_0^1 f(\pi_e, ex_e, dev) dr_{p1}$$

and,

π_e - expected inflation,

ex_e – expected exchange rate movements,

dev - types of financial instruments.

The total return of investment in the economy will be a result of the distribution between these instruments. Therefore, if the agents believe that the economy is facing high risks, than their yields will be closer to the yield of the funds that can cover these risks. Contrary, if there are no major economic uncertainties, the total yield of the agents will be closer to the best long-term investment. In reality, in countries with underdeveloped financial system, and where uncertainty is high, most of the funds are denominated in „a“ and „d*“ . Herein, a particularly interesting issue for us is the large share of foreign currency deposits. On the other hand, in countries where there is an option for portfolio diversification, the investments in such instrument are low.

The theory of time inconsistency suggests that the main factors that influence on the choice of investment possibilities, are connected to the capability of the government to maintain the planned policies. In those terms, agents analyze the threats of low inflation, stable exchange rate and existence of hedge instruments. Hence:

$$p_{i1} = \mu a + v d + \pi d^* + \theta s, \dots, (3.3)$$

$$\text{where } \mu, v, \pi, \theta \text{ are } f(\pi_e, ex_e)$$

and,

p_{i1} - total portfolio in financial instruments,

μ – proportion of current accounts,

v – proportion of saving accounts (domestic currency clause),

π - proportion of saving accounts (foreign currency clause),

θ – proportion of capital market investments-stocks,

$$\text{proportion of the } \mu + v + \pi + \theta = 1$$

It seems that the best option for protection against the volatile inflation and the uncertainty of the exchange rate ("c"), is to invest in financial instruments denominated in foreign currency. However, we should not forget that we are talking about economy in which agents are not allowed to invest in foreign external financial instruments, due to limited capital flows. For these reasons and in absence of hedging financial instruments, the agents will insist on investing in domestic assets that are free of the risk of the exchange rate.

1.2. Transfer of the free capital

In this part we will elaborate the case where the agents in the country have the opportunity to invest their funds in assets abroad. In that case, the distribution of the portfolio could be presented with:

$$p_2 = a + d + d_1^* + d_2^* + s + s_1, \dots, \quad (3.4)$$

where p_2 is $f(W, I, DEV, DEV^*)$; and $a, d, d_1^*, d_2^*, s, s_1$ are $f(c, c^* i_t, i_{t1}^*, i_{t2}^*, r_s, r_{s1})$; $t(0,3)$ and,

p_2 - total portfolio of financial instruments,

a - current accounts,

d, d_1^* - saving accounts in the country, d_2^* - saving accounts abroad,

s, s_1 - capital market investments - stocks in the domestic markets and abroad,

W - wealth,

I - income,

DEV, DEV^* - domestic and foreign capital market development,

c, c^* - trust in the domestic and foreign macroeconomic policies,

i_t, i_{t1}^*, i_{t2}^* - interest paid on savings in the domestic financial sector (domestic and foreign currency clause and abroad),

r_s, r_{s1} - return of investment in domestic and foreign capital market.

Thus, in this model we show that the agents can choose to invest not only in domestic, but also in foreign instruments. Therefore, the yield of the total portfolio will be the sum of:

$$r_{p2} = i_g + i_t + i_{t1}^* + i_{t2}^* + r_s + r_{s1}, \dots, \quad (3.5)$$

$$\text{where } \int_0^1 f(\pi_e, ex_e, dev, dev^*) dr_{p1}$$

Despite the uncertainty and the level of the yields on assets in the domestic economy, the agents will analyze the global economy and financial system too. Thus, if a country has a high level of deposit euroization, we should have in mind that domestic agents trust more on the external monetary authorities than the national central bank.

This analysis will actually have to answer the question whether the risks that are expected in the domestic economy may be reimbursed with the yields of the domestic or foreign funds⁴. The shares of financial instruments will depend from:

$$p_{i2} = \mu a + \nu d + \pi d_1^* + \delta d_2^* + \zeta s + \kappa s_1^*, \dots, (3.6)$$

where $\mu + \nu + \pi + \delta + \zeta + \kappa (\pi_{edif}, ex_{edif}, i_{dif}, r_{dif})$

and,

p_{i2} - total portfolio in financial instruments,

μ - proportion of now accounts,

ν, π - proportion of savings accounts (domestic currency clause)

δ - proportion of savings accounts abroad

ζ, κ - proportion of capital market investments, domestic and abroad -stocks,

π_{edif} - expected inflation rate differentials.

ex_{edif} - expected exchange rate differentials,

i_{dif} - interest rate differential (domestic and foreign),

r_{dif} - return differentials (domestic and foreign).

$$\text{proportion of the: } \mu + \nu + \pi + \delta + \zeta + \kappa = 1$$

In addition, for simplification of the model we accept that the differential of the exchange rate is equal to ex_e . In fact, if we assume that there is only one foreign currency, then there will be only one exchange rate. In addition, agent will analyze the expected exchange rate only, as in the previous model. Additionally, in this model capital mobility is assumed unlimited, because we think that the interest rate parity holds. This model now suggests that $\pi_{edif}, ex_e, r_{dif}$, as major factors in the decision process.

According to the risk aversion theory, domestic agent will invest abroad if π_{edif} and ex_e are growing, and r_{dif} is decreasing. If we assume that the concentration of the savings in an economy is in deposits

⁴ Here, to simplify the model, we predict that the difference in transaction costs for trading at home and abroad are negligible.

denominated in foreign currencies, and thus confidence in domestic policies is small, then the opening of the financial account should mean spilling of those deposits. The thesis that we wanted to test with these models is: What is the relationship between high deposit euroization and limited capital movements, and is there any possibilities for larger amounts of deposits to go abroad in case of capital account liberalization?

The models shows that the main factors that agents have in mind when they are investing, are the risks associated with the decisions of the macroeconomic policies. Moreover, if one wants to discover the link between deposit euroization and other variables in an economy, the answer should be connected with the inflation rate and the exchange rate movements' expectations.

In this regard, the analysis usually are directed to: changes in the level of prices in the economy, the money supply, the discount rate, the change in foreign exchange reserves, the current account balance or level of external indebtedness of the economy. These factors will be tested in the case of Macedonia in the following part.

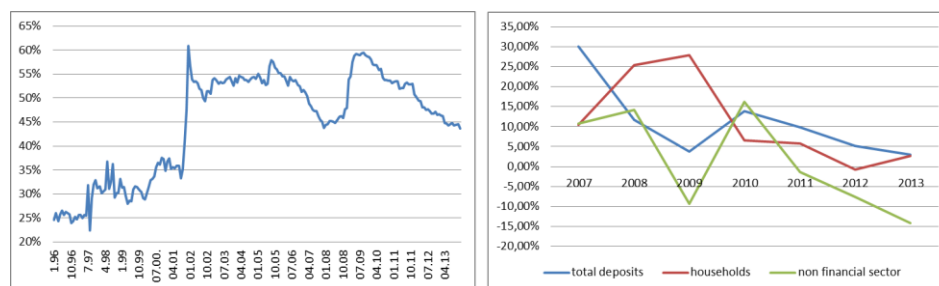
2. Liberalization of capital movements in Macedonia

If we accept the assumptions integrated in the previous models, we can accept that in one developing country with a high level of deposit euroization agents do not believe in domestic policies! In such conditions, the fear of loss of the value of properties by increasing prices or reducing the value of the domestic currency makes them to avoid assets denominated in the domestic currency. This is especially apparent in conditions of free capital movement, where the risk for most of the funds to go out of the domestic economy is very high. Hence, regardless of the instruments that we have invested in (deposits or securities), the motive for these investments will be to reduce the uncertainty of changing macroeconomic policies.

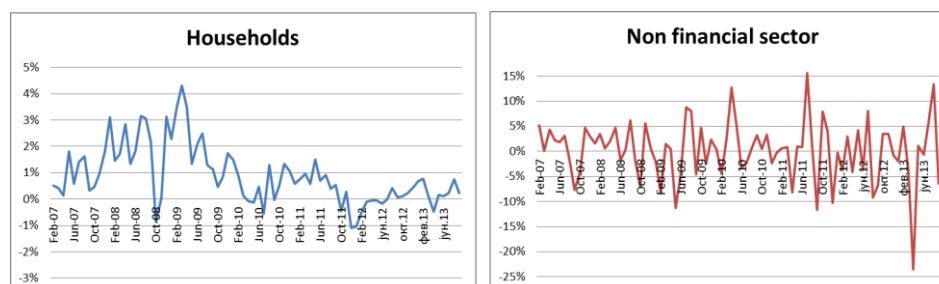
Below we will try to answer the question whether the factors for deposit euroization that we discussed in the previous part apply to the case of Macedonia. The idea that we want to test is associated with the possibility of unpredictable capital movements, especially if the financial account opens. For these reasons, the analysis seeks for conclusions that are based on the equation 3.3, where the reasons for investing in deposits

with foreign currency component are associated with expected inflation and depreciation of the exchange rate.

Figure I.3.: Deposits with foreign currency clause to total deposits, yearly and mounthly growth of the total deposits to households and nonfinancial sector



Mounthly growth of the foreign currency deposits



Source: NBRM, authors calculations.

Macedonia is among the countries with high rates of deposit euroization. Since 2002, the share of deposits with foreign currency component sets up to 45% of the total deposits. If we want to explain deposit euroization through the effect of distrust in domestic policies, than that is exactly what happens in Macedonia. In those terms, we can clearly notice that whenever an adverse event occurs in Macedonia, which affects decrease / increase the in confidence of domestic / foreign currency, the share of deposits with foreign currency component changes. This was especially evident during the period of 2008-2010, when with the decreased confidence in the euro the currency component of deposits had changed.

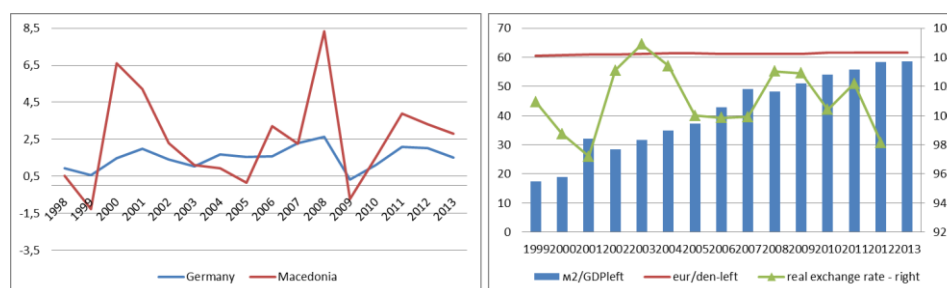
Distrust in achieving the goals of the economic policies is mainly connected with maintaining low and stable inflation and stable exchange

rate. Analuzing this, we will show the annual changes in inflation⁵. The rate of inflation will be compared with that of Germany, believing that full confidence in the euro comes from the confidence in the economic policies of Germany.

Figure I.4.: Inflation, nominal and real foreign exchange rate and the money supply in Macedonia

Inflation, year to year

*M₂/GDP(%), eur/den (nominal),
real exchange rate (base: 2005)*



Source: IMF, (IFS, 2014), NBRM, authors calculations.

Hence, taking into account the difference between the dynamics of movement of inflation in Macedonia and Germany, we can easily conclude why agents insist on deposits with foreign currency component. Namely, in terms of fixed exchange rate, if the country has a higher rate of inflation from the peg, long-term real appreciation of the domestic currency should occur.

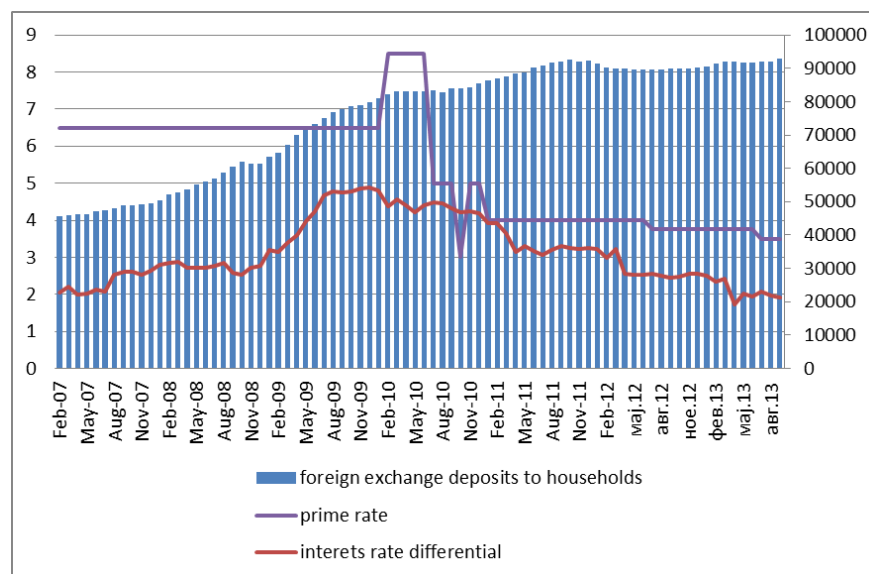
As mentioned above, the central issue in this part of the paper is: in case of financial account opening the deposits drain outside the country will follow. Previously we showed that mistrust economic policies can be acceptable argument for high deposit euroization in Macedonia. Moreover, based on that argument, but because of restrictions on capital movements, most households in Macedonia actually react to the changing expectations of inflation and exchange rate movements.

This can be illustrated with relatively high interest rate gap between denar deposits and deposits with foreign currency component, (in the analyzed period - 2.97 pp). In terms of expectations for changes in inflation and nominal exchange rate, the "shelter" in assets

⁵ IFS (2014).

denominated in foreign currencies is confirmed by the existence of the difference in the interest rate on denar deposits with currency component. That spread explains the mood for the currency of the household deposits. Moreover, we want to emphasize that if confidence in macroeconomic policies is not in doubt, the higher interest rate spread should not affect the increase in investments in assets denominated in the domestic currency. To this we could add that even in terms of negative real interest rates in the country the deposit euroization grows.

Figure 1.5.: Interest rate differentials, prime rate and the balance of the foreign currency deposits (million denars)



Source: NBRM, authors calculations.

Figure 6 shows that from the third quarter of 2007 to early 2009, the real return on deposits is negative, while the deposit euroization is growing (figure 5). This fact is rather expected, if we consider that the interest rate on deposits is dependent on the amount of the prime interest rate (that one of the treasury bills). Additionally, its movement in terms of a fixed exchange rate, is associated with the instrument to maintain its stability. This again points to the importance of increasing the confidence in the domestic currency.

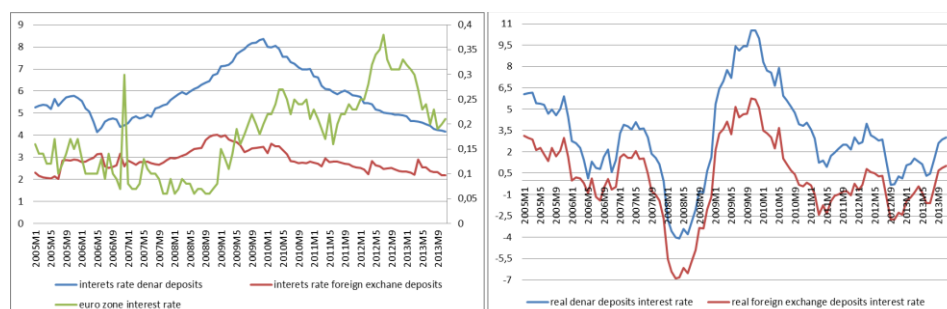
However, even though we have accepted that mistrust in the domestic currency is one factor for deposit euroization, this still is not an argument for outflows in case of financial liberalization. This especially

is apparent in conditions when real chances for loss of deposits does not exists, since most of the deposits are insured. After all, for such thing, one needs something more than the liberalization of capital movements.

If we accept the assumption⁶, that there are significant transaction costs for the transfer of funds between countries, the main motive for investing outside the country should be the returns of the funds (interest rate and returns on stocks). Given that, even in terms of free financial flows, the interest rate does not play a significant role in determining the level of deposit euroization, we can assume that low interest rates in the euro area (figure 6) also will not affect the amount of outflows from the country.

This confirms the expectations for convergence of interest rates as a result of the theory of interest rate parity. Hence, the fear of spilling out large amounts of money in the form of deposits out of the country could be based on the appetite for higher returns (interest), but with expectations of lower risk.

Figure I.6.: Nominal and real interest rates on deposits in domestic and foreign currency



Source: IMF, (IFS, 2014), NBRM, authors calculations.

The difference in the interest rates on treasury bills in Macedonia, The Eurozone and Germany can be analuzed as a signal for the perception and compensation for the higher risk. Here, we would like to mention that investing in treasury bills for households is not a full substitute for investments in deposits. Even thou, the analysis of the movement of the interest rates could give us two answers: first, whether there is a link between the growing level of risk to public finances at

⁶ With reserve.

home and abroad, and second, is there a connection between these rates and those of the deposits.

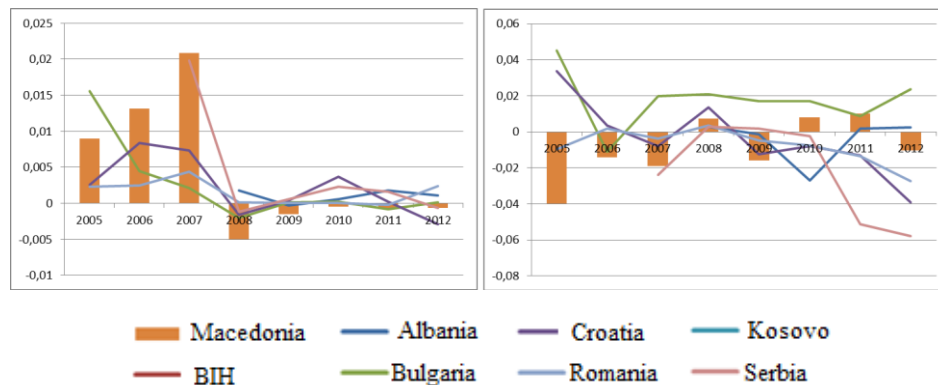
The analysis so far to this part of the paper can not find strong arguments for fear of sharp drain of the deposits abroad. In fact, since agents are investing in deposits with foreign exchange clause the perceived time inconsistency problem is to be compensated with the foreign exchange rate risk free instruments. These instruments can be also used as a hedge from the implication of the eventually inflation tax policies. Thus, this tool provides the agents to have fully protected and almost risk-free instruments in their portfolio.

The analysis to this point shows that, if agents do not respond to changes in interest rates, one of the reasons for seeking the save haven in the deposits with foreign currency component is exactly the existence of underdeveloped capital market. With this conclusion we have come to a head note of the entire course of the study. Namely, if we assume that with the opening of the financial account, the agents will invest in capital markets abroad, the question that arises is: Is it possible that the liberalization will not affect the development of the domestic capital market?

Figure I.9.: Portfolio investments (as % from GDP)

Equities

Net investments



Source: IMF, (IFS, 2014),NBRM, authors calculations.

Next thing we want to test is what the connection between domestic and foreign capital markets is. The negative balance of the financial account should not be considered as a signal for capital outflows in Macedonia. In fact, such balance could be interpreted as a signal form

the foreign investors, whose behavior can be followed by domestic agents. However, if we consider that the main factor for the changes in assets and liabilities are government debt securities and loans of the monetary authorities, as well as foreign institutional investors (particularly in the period 2007-2009), the greatest risk that the country could face is stopping the flow of funds on that basis, but not the private outflows. Here remains the question: Whether and how the change in the mood of the international creditors will affect the decisions of domestic agents regarding the type and location of their investments if the freedom in the choice of destination exists? To this point of the paper no other reason for capital outflows than the low macroeconomic policy credibility is factor for outflows of the domestic deposits. Additionally, if we have in mind that with the possibility to invest in foreign currency deposits⁷ that are secured with insurance funds, than the outflows of these instruments should not be expected.

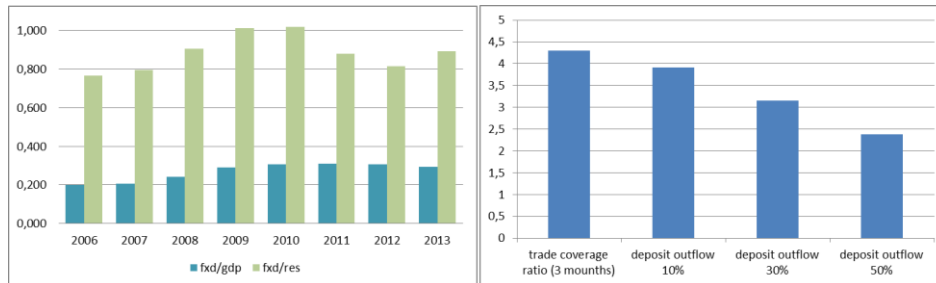
At the end of this paper, we will make a simulation of the change in foreign exchange reserves as a result from possible deposit outflows⁸. The scenarios are assuming that the expected deposit outflows will range from 10% to 50% of total deposits with foreign currency component. The results shows that only 50% of the deposit outflows will distribute the coverage of imports by foreign exchange reserves. That means that the foreign exchange reserves will fall below 3 months trade coverage.

This assumption, we must admit, is rather unrealistic. It is even more elusive, if we consider that 50% of deposits with foreign currency clause presents 25% of total deposits. Reduction of the deposit base by 25% for each banking system, especially for Macedonias', whose main source of funds is exactly the deposits would entail much bigger financial and economic turbulence.

⁷ That provides shelter from inflation and depreciation risk.

⁸ Here we want to stress out that we are aware that the deposit outflows does not mean that the foreign exchange reserves will decrease in the same amount.

Figure I.10.: Foreign currency deposits.GDP, total non gold foreign exchange and changes in the trade coverage ratio



Source: NBRM, authors calculations.

Conclusion

Cross-border capital movements within the global economy have been increasing steadily for the past decade. The years that followed year 2002 brought increase of capital flows from the rich to developing countries. In the year 2008 only, the International Monetary Fund measured growth in net private capital flows of 30%. This was supported by strong economic growth, favorable conditions for trade, low inflation and low interest rates worldwide. Literature dealing with the capital movements' liberalization concludes that even thou there is positive effects from the high amounts of inflow of foreign capital, they can pose a great threat too.

Analyzing the models that are representing the agents' preferences on investment in terms of both open and limited financial account shows several things. First, the agents are always seeking for an optimal portfolio that would bring them greater return and lower risk. Second, no matter the return rate, the major reason for theirs shifts from one to other instrument (less riskier) is the perception of the stability of the macroeconomic policies. This is especially connected with the possibility of the country's economic policies to maintain stable inflation rate and predictable exchange rate policy.

The central issue in this paper is: Will there be any changes in the deposit balance if a financial accounts opening occurs. Previously we showed that mistrust in the economic policies can be acceptable argument for high deposit euroization in Macedonia. Moreover, based on that argument, but because of restrictions on capital movements, most

households in Macedonia actually react to the changing expectations of inflation and exchange rate movements in the manner of euroization.

Hence, the assumption of no confidence on economic policies as a basis for possible deposit outflows, leads us to the conclusion that, even in a limited capital movements the economic policies must focus on establishing higher confidence. Finally, we have concluded that the possibility of investing in instruments without exchange and credit risk would affect the reduction of pressure on deposit outflows.

Having that in mind, liberalization of the financial account probably limits only the financial development, with no other expected negative results especially in banking deposit balances. This also is important when in the country the deposit euroization is allowed. On the other hand, the high level of deposit euroization, however, points out the weaknesses in the financial and institutional development. It is to these aspects that the economic policies should address their strategies.

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Original scientific paper

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ENTREPRENEURSHIP AND MANAGEMENT OF ANIMATION IN TOURISM

Abstract

The entrepreneurship, governance and organization are complicated processes that in the animation of tourism become even more complicated. Moreover, people that have the desired psychological and physical characteristics and skills for a good animator due to the lack of necessary knowledge, skills, abilities and experiences does not succeed to organize the activities of the manager. But, there are cases when a young person with a certificate in the field of management is not successful, due to lack of appropriate psychological and physical abilities.

Key words: Entrepreneurship, management, tourism, animation.

JEL classification: M, M2, M21

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Introduction

Animation programs with their goals support the broadening of the tourist consumption and this leads to effectiveness and efficiency which improves the tourist market. In the composition of the whole, animation entrepreneurship in tourism differs from the management of tourist animation, and it is important to define the characteristics of all the specifics of entrepreneurship animation in tourism, as well as the specifics of the functions of management applied in tourist animation.

Entrepreneurship animation in tourism

Animation and animation program, by definition, are a variety of recreational, cultural, entertainment and picnic activities that motivate people to actively participate in them, which will meet their needs and desires on the one hand, and increase tourist consumption for entrepreneurs on the other. Hence, animation program is innovative and spiritually inspired tourist service - there is no doubt for some companies about the efficiency of animation in tourist services. With the help of it, an innovative service that encourages increased consumption and experiences can be created. The presented findings increase the importance of certain basic characteristics of enterprises in the tourism animation (Cerovic, 2008:167).

Entrepreneurship tourism animation gets a new and important dimension in view of the importance of the tourism offer. Entrepreneurship covers secondary place in creative ventures to increase perceptions where the main goal is a new service, innovative program satisfaction and experience with visitors and increased 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, J. and Vujic, V., 1992).

Basically, all the settings for entrepreneurship have the 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 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 a tourist facility. Successful entrepreneurship in 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 following others.
4. The goal is to look high, always aim 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 manage the implementation of 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 meets 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 animation is not an 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 generate new profits that visitors should be satisfied with the offered animation program. Entrepreneurial skills are a natural gift, but such innate abilities can also be created with education.

Entrepreneurship in tourist animation is the ability to create resources and generate a new 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 the 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. According to some opinions, entrepreneurship in the tourist offer of animation program 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 the thesis for the entrepreneur as a 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 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 an entrepreneur. However, with the growth and development of the company, the increase

in the number of owners is going 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 differ from 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 organization and offer animation program for the visitors, needs an entrepreneur (entrepreneurial spirit), resources and power that creates entrepreneurial initiative. In the perception of entrepreneurship, inevitably companies create entrepreneurial term, the goal is always that 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 mentioned 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 creates new pleasure for the 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 it precisely. Property is a prerequisite, but not a major requirement of the entrepreneur. The entrepreneur has an idea, it 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 his 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 animation is expressed as a responsible person full of capabilities, a 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 the entrepreneur in the tourist animation. Entrepreneurs of animation companies or tourist hotel companies, mainly celebrities, authors of innovation, parties, games, recreation, animation and other tourist services meet the creators of visitors and meeting their desires for the guest who came to defense tourist destination or hotel. Entrepreneur in tourist animation, must be advocated, if it is to be successful, the following basic animation activities (Corper, 1992:12):

1. Permanently increase the quality and introduce new animation programs;
2. Efficiency and introduce new animation programs and encouraging animators for constant education and training;
3. Discovering the way for entering into a new animation market, expanding market;
4. Introduction of a new form of organization and a model for resource management in animation;
5. Exploring the new animation potentials and opportunities that can be placed on the market animation program.

An entrepreneur in tourist animation is a creative person with an entrepreneurial spirit that is capable of innovation and creation to meet the needs and motivation of the company as well as business partners. Entrepreneur of 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 to organize and implement animation program for the guest to be satisfied, and entrepreneurs to achieve the expected profit from increased tourist consumption.

Management of animation in tourism

Governance and organization are complicated processes, so that the animation of tourism becomes even more complicated. Moreover, people that have the desired psychological and physical characteristics and skills for a good animator due to the lack of necessary knowledge, skills, abilities and experiences do not succeed in organizing the activities of the manager. But, there are cases when a young person with a certificate in the field of management is not successful due to lack of appropriate psychological and physical abilities (Jakovlev, 3., 2010:59.).

For the purpose of successful creation and implementation of the animation programme, when defining the structure of management of animation in tourism, certain assumptions should be taken into consideration: preparedness for communication and cooperation with other people and communication as a result of mediation, communicational skills and usage of these skills, balance of skills and knowledge, respect to the existing limitations of the used resources, finding a proper solution in terms of change in the physical environment, consciousness for the existence of risk (Cerovic, 1999:118).

Management activity must be based on the needs of the visitors, which are major factors in the tourist services and it cannot be based on the needs of the managers. In this context, the management in the animation of the tourism is based on fundamental characteristics of management that are applicable in other segments of the economy. But, there are certain characteristics that make management of the animation in tourism different from the management that is of great importance in the other fields of the economy. According to the professor Zdravko Cerovic, these differences are result of:

- the needs and motives of the visitors;
- the cultural and historic inheritance;
- the religious, moral and ethical determination;
- the specific approach to the tourism market;
- the structure of the capital and ownership in the tourist economy;
- the different tourist destinations and its resources;
- the limitations that come from the form and type of the different objects and contents;
- the relation to the knowledge in the field of the technique;
- the content of the lawful and economic norms that regulate this specific area (Cerovic, 1999:118).

Despite the accomplishment of the general criteria for manager abilities, from the managers in the animation of tourism it is required to be communicative and highly motivated, to believe that goals can be achieved every time, because it is known that goods are not sold in tourism. On the contrary, tourism includes services and pleasures that cannot be measured by quantity. The satisfaction of visitor's needs, which is the primary objective of the holders of the tourist offer, contributes to different kinds of advantages that have an impact on the length of the tourist destination, the extension of the tourist season and the profit to be realized. There is a certain number of authors that deal with exploration and research in the management of animation in tourism and give their own definitions. It is considered that the most appropriate definition is given by the professor Zdenko Cerovic. According to him, **“The management of animation in tourism is a sum of specific skills and knowledge that is used together with the limited resources, contact between the offer and demand, so that the visitors – users of the animation services and certain number of animators could organize, plan, coordinate and control the degree of satisfaction of the needs and wishes of the visitors and take into consideration the agreement between the motives and the criteria of selection the contents** (Cerovic, 1999:119).

From this definition it can be considered that the animation in tourism is a bidirectional process, in which the needs of the visitors can be satisfied on one hand, and it can increase the number of the consumption in tourism on the other hand, so that the focus is given to the economic side of the animation programme. In this direction, professor Zdenko Cerovic determines the following functions of the management of animation in tourism:

- planning and programming of the animation in tourism;
- organization of the staff, technology and space where the program will be completed;
- coordination of the program and people involved in it within the frames of specific special and other conditions;
- process of choice of animators that possess knowledge and psychological and physical abilities for performance of the program;
- development of communication, especially in the adaption of the program in new conditions and disposition of the guests;

- permanent control and coordination of the participants in the process from the initial idea all the way through its fulfillment, till payment of the animation service;
- evaluation of the animation service (whether the animation program is successful and whether the visitors are really satisfied);
- evidence that the team of the manager accomplished the objectives (Cerovic, 1999:119).

Planning of animation in tourism

It is known that every managerial activity begins with planning, so according to this, the management of animation in tourism begins with planning of the programs that will be offered to the visitors during the visitor's stay. The process of management also means completion of managerial plans. There are short-term, mid-term and long-term plans. In the management, the plan is a direction of the future action despite its length (Kontz, 1994:122).

According to this, the principle of planning must be definitely known in the management of animation in tourism and this includes:

- mission and objective that determine the fundamental functions, and the basic task in the animation of tourism. The objective is accomplishment of the animation as a general and basic objective, in which by a global activity is defined the direction of operation and the development of the tasks and further activities;
- the objective is the final point that is directed animation activity that does not include just a final point, but a form of organization, a mode of operation and control of the animation;
- the strategy in the process of planning is defined as a wide area of operations that will be accomplished thanks to policies and procedures within a time period of one or two tourist seasons;
- the policies are guidelines that are based on plans. These are fields with which different decisions should be made. Policies are of great importance for one tourist season. In this category the criteria for evaluation of the profitability of the programs can be mentioned, the policies of remuneration of the animators, the policy of prices according to which the animation programs will be sold etc.

- the procedures are result of good operation of the plans and consist of many procedures that determine the guidelines of certain action. Furthermore, that is a plan for a certain animation, manifestation or event that must be put through in a specific period, space and with qualified stuff, and it includes the procedures of tickets sale, accommodation of guests, the organization of payment etc.

- The rules are clear descriptions of performance that determine the specific action that has not had a great freedom of decision. The procedures are a sum of rules, so the rules are a lower form of procedure development. In the animation in tourism, the rules determine precisely the details how to accomplish the training of the animators, the animation programs etc.

- The programs and the calculations are the lowest form of plans that include a lot of details about operative plans, technological steps that must be taken in the future. Consequently, the animation programs will be in accordance to the plan. The programs usually are a result of contract between the creators (the performers) of the programs and the persons who demand the animation services. The calculations are valued formulated programs. They are financial plans with which specific activities will be performed. They formulate the financial matters in a certain time period (Cerovic, 1999:121).

Organization of the animation in tourism

The organization as a managerial function determines the character and role of management in the animation of tourism. It is well-known that the objectives in tourism management are accomplished with many tasks that are performed in accordance with a lot of rules of organization as an instrument for accomplishment of the objectives. The management of animation in tourism has a lot of tasks, but one of the most important components is the determination of the organizational structure that will extremely help in the accomplishment of the whole task (Cerovic, 1994:57).

In the management under the expression “organization” is understood a desired and formalized organizational structure (Kontz, 1994:212).

The organizational structure of the animation in the tourism is in the simplest organizational structures. The organizational structure in

many combinations of forms of organizational structures and in the animation in tourism involves a structure of two levels. As a consequence, the managers should have a knowledge of many fields and the animators should have appropriate skills to help in the performance of different process functions and specific tasks. From the previous experience, in the animation in tourism, the management may not be strictly specified for a certain segment from the animation because it must involve all domains of the animation.

Governance of the animation in tourism

The governance as a structure in the management is an important function that has a huge impact on the internal organization and content of the animation. The governance is basically performed by people that contribute certain advantages for the organization and fulfillment of all objectives to be realized (Kontz, 1994:212).

The basic function of governance includes the human aspects of the management because the governance is actually a behavior of the individual in front of the members of the enterprise. In a broaden sense of the word, the governance (operation) means adherence of visitors within their holiday in order to offer their tourist program and satisfy their needs as well (Cerovic, 1999:125).

The governance involves motivation and communication which are actually the basic segments of the animation in tourism. The governance of the animation activities is not possible without good organization and precise formulized plans and programs. The manager is leader in every animation activity. The animator must have the characteristics of a leader although he/she is not a manager.

In a psychological sense of the word the leader must be a person with their own example, verbal and non-verbal communication, suggestions etc. The leader always knows the objective that must be fulfilled. He/she knows how to operate in the company. But, the organization has also the right to select their own manager in whom they will confide. The manager is identified in the company according to the fact that their has the great influence upon the employees. The manager determines the direction and activity of organization. The mode of operation of the enterprise is not defined with the plan because the focus is given on the creativity and other abilities of the individuals. It can be

considered that the animator is not a manager, but he/she is a leader. The visitors confide their free time to the animator. The animator is not just a leader, but a person that communicates with the group, a person that can organize and inform. What is more, the animator takes into consideration a lot of information from the group in order to have a positive influence on the cohesion of the group, but at the same time transfers these information to the manager. The animator must organize the group very well and must motivate the group to take part in the animation programs (Яковлев, 2011:69).

Taking into account everything, it can be considered that the manager and the animator are leaders, but they do not have same functions because the manager can be an animator and the animator cannot be a manager. The animator is the major performer of the programs that are created by the manager. Despite all the skills and professionalism, the animator is never in the situation to perform all the functions that are operated by the manager (Cerovic, (1999:126).

Conclusion

Taking into consideration the importance of the Entrepreneurship and management in the operation of the enterprise and the mode of operation, the Entrepreneurship and management are imposed as fundamental elements. This is as a result of: the social character of the Entrepreneurship and management by which the obligations are organized in direction of effective and efficient accomplishment of the objectives, the fact that the Entrepreneurship and management are basic characteristics in the industrial society and the fact that the Entrepreneurship and management are the most important organs in the enterprise. In this context, the Entrepreneurship and management become the fundamental elements in the enterprise as long as the civilization has existed. It can also be highlighted that the management is an universal activity that is used in many organizational systems (governments, ministries, municipalities, universities, hotels, tourist agencies, airports, shopping centers, companies, hospitals, societal organizations, political parties etc.) is present in all functions and all levels of hierarchies in these systems. According to this, it can be emphasized that the management is a dynamic process because it gives life to every aspect of the business activities.

Taking into consideration that the Entrepreneurship and management are category that are crucial for the countries with market orientation, it can be said that our country as a developing country must undertake all the measures for appropriate implementation of the management in all segments of the economic and social system in tourism. The Republic of Macedonia as developing country must intensify the development of tourism. As a result of this, it can be involved equally in the international economic relations. Will our country succeed in this matter is a question whose answer depends on the fact whether we will know to use our abilities. Undisputable fact is that the Entrepreneurship and management are of great importance to the development of tourism. On the other hand, it is confirmed that tourism has a greater impact and it is a multiplier of the economic development. Taking into account that our country has a lot of natural, material and human factors for development of tourism that are not used properly at all, a lot of attention should be put on finding solution to these problems. The tourism as a phenomenon of the 20th and 21st century is of social and economic importance in the world. Of course, every country is interested in the economic influence of tourism on its development. So, appropriate service should be offered to the visitors. The tourists' stay must be filled with different activities from the domain of sport and recreation, culture and entertainment. The animation of sport is the most important way of filling the free time of the visitors. All services, especially the animation in tourism must be effectively and efficiently managed. The guest must be extremely satisfied. Only on this way a profitable tourism may be expected.

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Original scientific paper

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THE CHANGES ON THE MARRIAGE MARKET IN THE REPUBLIC OF MACEDONIA

Abstract

This paper deals with the conditions on the marriage market in Macedonia. Firstly, we explain the economic approaches of studying the marriage market and then the paper evaluates the population structures and its ratios according to age, sex and marital status in the Republic of Macedonia. Aggregate data about population structure by sex and marital status from the census years 1994 and 2002, and data from labor force survey from 2012 have been used to estimate the relevant gender ratios and imbalance. Then, we have described the gender imbalances and discuss their implications for Macedonia's marriage market. We have estimated that in the future there will be more males in Macedonia who will not be able to find women. With the aim for the future implications for the Macedonian marriage market to be understood more precisely, at the end of the paper we have calculated *SMAM* according to Hajnal method on a base of 2012 age register data for single males and females in the Republic of Macedonia. The results show that there is smaller reduction of singles for men than for women.

Keywords: marriage market, marital status, gender imbalance, *SMAM*, Hajnal method.

JEL Classification: J12, J13, D130, O150, R23

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Introduction

One of the biggest influential changes during the last century in all modern societies is the role of marriage in family formation. Before the 1960s, marriage was an essential precondition for couples that wanted to live together and have children. After the marriage boom during the early 1960s, the propensity towards marriage started to decline slowly, even consistently². In many European countries the institution of marriage was gradually overtaken by new forms of unions. Moreover, separation and divorce rate growth suggested an increase in marital instability. In the last twenty years, the family formation process has changed in Macedonia quite a bit. As elsewhere in Europe, in Macedonia there is a general trend to postpone the key demographic events: leaving the parental home, getting married and parenthood are experienced on average later than before. In Macedonia people are also facing increased marital instability and tendencies of increased number of divorces, but one can claim that marriage is still the main reason for leaving the family, forming one's own family and childbearing. The main goal of this paper is to provide a systematic description and structural explanation of the different age and sex patterns of the marital status in Macedonia, and especially to present the implications on the marriage market. To do this, we have used two main methods: first, a set of statistics to measure in details the population structures according to age, sex and marital status. The analysis has been performed with the help of census data from 1994 and 2002, and available estimates from the Labor Force Survey conducted in 2012. The second, the Hajnal method, was used to evaluate the future implications to the Macedonian marriage market.

1. Economic approach to studying marriage market

In the literature there is a widespread consensus on the definition of the term of the marriage market. The economic approach in studying marriage was developed recently by the economists (Becker 1974, 1981) to explain why people marry or remain single, how they live their

² Fraboni, Romina (2004), Dynamics of nuptiality and the marriage market in Italy: *Genus*, LX(No.1), 3-4, July-December, 2004, p.37.

married life, what is the frequency of divorce and the reasons for it³. Becker (1973, 1974) was the first who applied the economic tools in order to analyze the family. Generally speaking, the marriage market is the place for interactions between sexes in the quest of partners: each person is not just an object or only a buyer, but he/she plays a double role and mutual consensus must be achieved. "The process of choice of a partner, closely connected with the knowledge of supply with potential partners, was also compared with the process for looking for a job at the labor market"⁴. The exchange theory assumes that beyond all available partners, a person will choose a partner with who they are most likely to have an effective social exchange. In some partnerships, both partners are serving each other as resource providers. Both partners win since they become a couple when starting to share their resources.

According to Edwards, the chances of a person on the marriage market are determined at first by their social status, and second, by the "interpersonal skills and personal capital"⁵. The economic theory of the family also sees single persons on the marriage market as rational actors who are trying to maximize their benefits with the choice of partner. Here, the person is a producer of commodities that cannot be purchased on the market. The theory defines commodities as goods and services which directly create benefit and pleasure. A large part of these commodities, such as children, prestige, altruism, friendship and love, cannot be created only by one individual alone, but together with a partner. The creation is most efficient with a partner who has higher resources. Higher education increases the income and the education of the children, a person with higher reputation transfers it on the relationship with his/her partner, and the higher physical attraction of a partner means an intrinsic and social benefit. In an efficient marriage market, the superior people tend to marry each other and compensate for their higher productivity. "Higher-quality men and women marry each other more than with lower-quality partners to complement these qualities; a superior woman raises the productivity of a superior man, and vice versa"⁶.

³ Fraboni, 2004:51.

⁴ Fraboni, 2004:51.

⁵ Fraboni, 2004:6.

⁶ Becker, Gary Stanley. (1993). *A treatise on the family*, Harvard University press, p.114.

“A person entering the marriage market, if it is expected that his/her marital income exceeds his/her income as a single, thus, the income that is imputed through the marriage market determines not only the choice of the persons to marry, but also determines who will be single”⁷. Some men are forced to be alone if N_m exceeds the number of women, N_f . Those men who cannot compete with other men for the indigent women are alone, because they would receive less from the marriage than the other men. The formation of marriage significantly depends not only on the current socioeconomic characteristics of a person, but also on their estimated long-term socioeconomic prospects because marriages are planned to last long. With more continued education and promotion at work, however, it is possible to make good estimates for the future socio-economic characteristics of a person and their ability to support the family, especially the lifestyle young couples are used to. In a competitive marriage market, each subsidy to marriage will enable the young people to marry upon the future prospects than the current reality. People aim to maximize the benefits of their partnerships. The usefulness of the partnership grows with the partners’ resources. Therefore, at the marriage market, attractive are those persons who have higher social and personal resources. It is important to underline that the search for a partner is a process that takes place not only in the particular area called marriage market, but includes several social contexts, such as school, university, work place, place of residence, recreation, neighborhood, friendships, family, relatives, political, religious, sport and cultural associations, etc. Each of these places is a potential marriage market, with varying levels of involvement.

Another factor that is decisive for success on a marriage market is participation in the contexts of the possibilities⁸. People get to know each other in social contexts, such as a circle of friends, family, work place, public events and so on. In order to find a partner, it is necessary to participate in such contexts. Known rule is that “if you do not meet people, you cannot find a partner”. While these contexts for meeting were usually organized by the family earlier, in a modern, individual society, each person is responsible for participation in these contexts.

⁷ Becker, 1993:119.

⁸ Glowsky, David. (2006), “EU-Citizenship as a resource in marriages with women from less developed countries.” An analysis of transnational assortative matching based on the german socio-economic panel, Berliner studien zur Soziologie Europas Nr.7, Freie Universität Berlin, Institut für Soziologie, Berlin, 2006, p.8.

Marriage market studies have shown that 63 percent of all couples are meeting in the contexts 'friends/acquaintances' and 'going out'⁹. According to Louis Henry, in 1972, the basic idea of his model for marriage is that the process of meeting members of the opposite sex, developing a friendship etc., leading to an eventual marriage, does not take place in a "marriage market" on national level, but it is more likely to happen in very small groups, which he called "circles", which means that within any circle marriage can happen in a way that appears to be a random pairing of men and women, the age of men and the age of women being statistically independent¹⁰.

According to the model of MC Farland, the number of men in i -age group looking for women in the j age group, and the number of women in j age group looking for men in the i age group, however, will not be the same, except by accident i.e coincidence. The chances to find a partner does not depend only on the attractiveness of the person. Two further conditions must be met: a) the marriage market must offer a suitable partner, and b) the person seeking a partner must be able to find such a partner¹¹. Finding a partner is partly a function of relative numbers and dispersion of accessible and available members from the opposite sex. So, people do not want to get married just with anyone – they want to choose a partner. Therefore, if and when a person finds a partner is also linked with the availability of "suitable" partners, and the success of the search depends not only on numbers, but also on the relevance of information on the important features of the one who is also looking for potential partners¹².

The availability of the members of the opposite sex, their suitability and the knowledge for their suitability varies systematically with the age, but not necessarily in the same direction. However, the availability of potential partners tends to decrease with the age as people get married. Becker basically regards unmarried men and unmarried women as potential trade partners. Some couples married i.e. "traded" because each of the partners can get more by getting married (trade) than

⁹ Glowsky, 2006:8.

¹⁰ Farland, D. MC David. (1975), Models of marriage formation and fertility: Social force, Vol.54, No1, (Sep.,1975) pp.66-83, Oxford University press, p.69.

¹¹ Glowsky, 2006:7.

¹² Glowsky, 2006:66-83.

when they are alone i.e. “not trade”. Just like in all trade relations, the benefits from marriage are based on what each person offers for trade¹³.

2. Main features of the marriage market in the Republic of Macedonia

In countries where the births happen mainly in legal i.e registered marriages, like Macedonia, changes that occur in the structure of the population in the marital status over time adversely affect the quantity of the population. These changes are monitored by population censuses on one hand, and by vital statistics for natural population changes on the other hand. The marriageable population consists of: unmarried men and women, widowers-widows and divorced people¹⁴. The mutual relationship between these two groups (marriageable group and group of married men and married women) is such that increasing of one of the groups automatically causes reduction in the number of the other group. It is normal that in the younger ages the group of unmarried men and unmarried women is represented more, and in older ages – widowers, widows and divorced persons. Here, special attention should be paid to those people who are not married, especially those who are able to marry but they have never married. The study of changes in the marital structure of the population, according to the data available and their impact on the state of the marriage market stands out as a subject of this research.

2.1. Changes in the population in Republic of Macedonia by sex and marital status

The population structure by the marital status is mostly correlated with the distribution of the population by sex. So first we will see data on

¹³ Oppenheimer, Valerie Kincade. (1988). A theory of Marriage Timing, American Journal of Sociology. Vol.94, No.3 (Nov., 1988), The University of Chicago press, p.563-591.

¹⁴ Ivanova, Olga. (1985). Changes in the fertile marriageable population in SR of Macedonia in proceedings: Problems of demographic development in SR Macedonia, papers from scientific meeting, Leunovo, 3 and 4 November, 1983, MANU, Skopje, p.187.

the structure by sex of the total population and of its constitution of persons over 15 years of age for 1994, 2002 and 2012:

Table 1: Population in Republic of Macedonia by sex and age, 1994, 2002 and 2012:

	Total		Over 15 years		Number of men to 1000 women (masculinity)	
	men	women	men	women	under 15	over 15
1994	968931	966103	721597	732485	1058.7	985.1
2002	1015377	1007170	792580	796695	1063.5	994.8
2012	1032532	1028512	850462	857738	1067.6	991.5

Sources: SSO: Census data for 2002 and 1994, Men and women in Republic of Macedonia, 2012, p.16.

According to the 1994 census in the Republic of Macedonia there is a total of 968931 men and 966103 women, i.e 2828 men more. The number of men to 1000 women, in demography known as masculinity, according to the 1994 census is 1003¹⁵. These differences generally are not large but are very important from a demographic and socio economic aspect. The populations under 15 years of age have higher masculinity than the population over this age. It amounted to 1058.7 in 1994, in 2002 is 1063.5 and 1067.6 in 2012. While the younger age group (under 15) had an increasingly consistent ratio in all the observed years, in the population group over 15 there is a the negative tendency with diminishing fluctuations in women in 2012 and the male population exceeds the female population in all three years. It is known that in Republic of Macedonia more male than female children are born. As a result of this situation, according to the conditions in 1994, 2002 and 2012, the number of male population exceeds the female population. However, it is known that the average life expectancy (expected life

¹⁵ State Statistical Office (2013). Statistical yearbook of the Republic of Macedonia, 2012, Skopje, June 2013, p.54.

expectancy) for women is several years higher than for men¹⁶. As a direct consequence of it, in the higher age groups the number of female population exceeds the number of male population. The number of men in the total population of Republic of Macedonia prevails in the age group to 45, and then the female population consistently dominates, and this tendency can be seen in the above table in the number of male and female population over 15 years of age.

According to Marriage Law, the lowest limit for marriage is determined by adulthood, with the age of 18 years (there are cases of marriage under the age of 18 while the upper age limit for marriage is not determined). 18 years is the minimum legal age for marriage without parents' approval and 16 years with parents' approval in the Republic of Macedonia, both for men and women¹⁷. The quantity of the married population solely depends on the number of marriages. Thus, for example, in the census in 1994 in Republic of Macedonia 15736 marriages were concluded, in 2002 – 14522, and in 2012 – 13991 marriages. Observing the year 2002 and comparing it to 1994, a decline can be noted, and there is also a further decline in 2012, and if the number of the marriages in 2012 is compared to the census year 1994, its number has decreased by 11.1%. With regard to age, it can be concluded that in 2012 the most frequent age for women to get married in Republic of Macedonia is 25.6 years. Men usually married at 28.4 years old, according to the estimates in 2012. According to the census data from 1994 there were 493534 married men and 514021 married women. According to the data of 2002 census, in Republic of Macedonia there were 523338 married men and 535252 married women, and in 2012 taking into account the estimates of the SSO the number of married men was 534091, and 543736 women. It is obvious that in the census years and in the years with the estimates there are more married women than married men and this ratio ranged from 1.042 in 1994 to 1.023 in 2002 and 1.019 in 2012 on 1000 married men.

¹⁶ According to the estimates of the State Statistical Office of Republic of Macedonia, life expectancy at birth for the period from 2010-2012 for men is 72.97 years, and for women is 77.05 years.

¹⁷ United Nations (2013), Demographic yearbook 2012, Department of Economic and Social affairs, United Nations New York 2013, p.569.

Table 2: Population in Republic of Macedonia over 15 years of age by sex and marital status, 1994, 2002 and 2012:

	Population over 15 years of age according to marital status								Cohabitation males	Cohabitation female
	Married men	Married women	Unmarried men	Unmarried women	Widowers	Widows	Divorced men	Divorced women		
1994	493534	514021	197888	135641	22514	69073	4797	11857	912	920
2002	523338	535252	237384	166366	27392	83832	7635	15068	/	/
2012	534091	543736	264957	193229	22544	77955	9052	14616	4601	5099

Sources: SSO: Census data 2002 and 1994, Labor force survey, 2012, p.38.

2.2. Marriageable population in Republic of Macedonia

We have previously noted that the marriageable population is the base from which future marriages are recruited and created. The impact of this group of people can be very strong and decisive on the course of family life and for the reproduction of the population in a country. As mentioned earlier, the marriageable population consists of persons who are not married yet, and who have by law legal age for marriage. The previous table shows the data for the general contingent of the population for marriage i.e. marriageable population, the persons over of 15 years of age. The percent of the single population over 15 years of age from the total population over 15, according to 1994 census, was 27,42% single men, in 2002 29.83% and, according to the estimates, in 2012 it reached to 31.72%, and the percentages for the single women in turn for the mentioned years were 18,52%, 20.78%, and 23.15%, respectively. From 1994-2012 there was a certain increase in the percentage of single men and an increase was observed for the single women as well. This increase was 4.3 percentage points for single men and 4.63 percentage points for single woman concerning the mentioned period 1994-2012. In 2012, for example, in absolute terms, the number of single men was 264957, and of single women 193229. So, there were 71728 more single men than single women.

The group of widowers-widows in the census 1994 and 2002 and estimate year of 2012 shows quite large differences by sex. In 2012 the total number of widowers was 22544, and of widows was 77955, indicating that there were three times more widows. This disproportion is mainly due to the fact that for a widow, for several reasons, it is more difficult to decide to get married again than for widowers. In addition, mortality of men is higher than mortality of women, and therefore in more advanced age the number disproportion is increasing. According to the data of the previous table 2, the number of widowers is almost identical of the first observation in 1994 census year with the last 2012 estimate year, but when observing the census in 2002, this number had increased. There are noticeable changes of widows in the direction of decline observed only in 2012 compared to 2002. Compared to 2002 the number of widows decreased about 7% in 2012.

Data on the total number of divorced persons according to the presented years generally show that their number increases. As an illustration, according to the 1994 census data 4797 divorced men were

registered and 11857 divorced women. By 2012 the number of divorced men had risen to 9052, and concerning the divorced women there was a growth in 2002 with total of 15068 divorced women and then again their number decreased to 14616 in 2012 compared to 2002, but it was increasing compared with the first observation of the census 1994 year. The percentage of divorced people from the total population by gender in 1994 is as follows: divorced men 0.50%, and 1.23% divorced women. In 2012 the percentage increased to 0.88% for men and there was a slight increase to 1.42% for women. Obviously, in all three observed years in Republic of Macedonia there were more divorced women than men. According to the 1994 census, on 100 divorced men there were 247 divorced women, 197 in 2002 and 161 in 2012.

2.3. Minimum fertile marriageable contingent of population in Republic of Macedonia

From the perspective of family creation and population reproduction, more interesting to consider is the so-called minimum fertile marriageable contingent of population, which covers only persons from 25-49 years of age. The state of 'not married' of the larger part of this contingent of the population may have decisive impact on a family life of a population and for its normal reproduction.

Table 3: Marriageable contingent of the population from 25-49 years in the Republic of Macedonia, 1994, 2002, 2012

	Total		Unmarried		Widows/Widowers		Divorced	
	Men	Women	Men	Women	Widowers	Widows	Men	Women
1994	347731	341632	51064	22631	1363	7120	3308	5840
2002	377733	363436	75241	34357	1459	10098	5236	8670
2012	392203	377676	111149	56887	1544	3919	5703	7168

Sources: SSO: Census data 2002 and 1994, Labor force survey 2012 and Men and women in Republic of Macedonia in 2012.

The minimum fertile marriageable contingent of the population (25-49) was 135061 in 2002 and 91326 in 1994 and according to the 2012 data for this category of persons, there is an increase of its total

number for about 27.5% compared to 2002 and about 51% compared to 1994 respectively. The minimum fertile marriageable contingent of the population with 25 years span (25 years' time interval) in 2012 comprised 186370 persons that were unmarried. It represents 24.21% of the total population from 25-49 years of age, or approximately every fourth person of that age was not married. There were 118396 males and 67974 females. The number of surplus men who were not married and who had the status marriageable population was 50422 persons. In the male population contingent for marriage, unmarried i.e single accounted for 93.88%, the widowers for 1.30% and the divorced men for 4.82%. According to this, the male marriageable contingent consists mainly of unmarried persons. Women contingent for marriage consisted of a little more widows (2.27%) and more divorced (10.55%) members, while the percentage of unmarried was 83.69%. Comparing the number of persons in each gender group by marital status, it may be noted that there is a surplus of unmarried of 54262 persons. However, the surplus of widows is double. To the total number of 1544 widowers there are 3919 widows (the proportion is more than 1:2). The difference between the number of divorced men and divorced women is also remarkable (5703 men to 7168 women).

Table 4: Marriageable fertile Contingent in Republic of Macedonia, 1994, 2002 and 2012, unmarried men and women by age:

	Unmarried		Unmarried		Unmarried	
	men	women	men	women	men	women
age	2012	2012	2002	2002	1994	1994
20-24	76370	60509	71850	48607	60960	36342
25-29	57957	33199	38392	18776	28895	11462
30-34	27858	12492	17294	7309	12210	4431
35-39	12871	4665	10007	5100	5729	2820
40-44	7321	3570	6630	1080	2821	2337
45-49	5142	2961	2918	2092	1409	1581

Sources: SSO, Labor force survey 2012/2007, Men and women in Republic of Macedonia in 2012.

Furthermore, given the data only on unmarried men and women by age in table 4 above and having added the age group 20-24 to the fertile marriageable population (25-49) and then if we analyze only the

data according to the state of 2012 it can be said that younger women at the age of 20-24 experience pretty favorable situation, given the higher number of unmarried men in the same age group and in the upper age group. However, in the age group 25-29, women can already face challenges from structural aspect, unmarried women aged 25 and above can encounter difficulties since there are fewer older unmarried men belonging to the upper less numerous age groups. However, by contrast, the high proportion of unmarried men that are available in the same age groups could accommodate the unmarried women aged 20 or older, and especially those older than 25, in even more advantageous position than men in the marriage market, in a way that this could lead to more favoring to the homogamy age couples.

3. Measuring imbalance of the Marriage market

It is often emphasized that the role played by economic, social and cultural factors in choosing a partner is very important. In addition to these individual and environmental factors, there are structural factors that may or may not limit the formation of the unions. From this point of view, the marriage market depends on characteristics of the population structure according to sex and age¹⁸. The ratio between the number of available men and women is one of the factors that affect the decision to marry or to remain single. Every possible inequality of the marriage market may be noticed if compared to the different number of groups of cohorts of men and women. Like any market, the marriage market may also be unbalanced, as for example it may be due to the general lack of men after a war. On every marriage market, the age groups are married endogamous, which means that the greater the age difference between two people, the more unlikely it becomes that they will marry¹⁹. The most simple way to measure the imbalance of the marriage market is to use the ratio between sexes, which usually is expressed as the number of available men (by age and, maybe, marital status) to every 100 available women²⁰. The imbalances of the marriage market in Macedonia can be observed from the age groups below, when in certain age groups, typical for marriage there are more singles i.e singles from one sex than the

¹⁸ Fraboni, 2004:37.

¹⁹ Glowsky, 2006:8.

²⁰ Fraboni, 2004:38.

other. From table 5 we can see that the number of unmarried available males is almost twice bigger than that of available unmarried females in the age group 25-29, and more than double in the age groups 30-34, 35-39 and 40-44.

Table 5: Number of single males to 100 single females by age groups in Macedonia, 2012:

	Single males	Single females	Ratio
age	2012	2012	2012
20-24	76370	60509	126.2
25-29	57957	33199	175.0
30-34	27858	12492	223.0
35-39	12871	4665	276.0
40-44	7321	3570	205.0
45-49	5142	2961	174.0

Source: SSO, Labor force survey, 2012, page 39

Table 6: Sex ratio: Republic of Macedonia, 2010

At birth:	1.077men/woman
Under 15 years:	1.08men/woman
15-64 years:	1.02men/woman
65 years and more:	0.76men/woman
Total population:	1 men/woman (2010 estimate) ²¹

Source: *World demographic statistics*.

The ratio between men and women at the age of marriage, i.e the number of unmarried men to 100 unmarried women by age groups is a useful measure for determining the shortcomings of the marriage market²². It has long been known that the sex ratio at the age of marriage

²¹ Number of men to every woman in the five age groups – at birth, under 15 years, 15-64 years, 65 years and more and for total population. Sex ratio will have influence on future marriage models and fertility models. At the end it could cause troubles at young adult men who cannot find partners.

²² U.Neelakantan, M.Tertlit. (2008). A note on marriage market clearing, Economics Letters, xxx(2008) xxx-xxx, p.1.

is not necessarily equal to the gender ratio at birth or with the sex ratio at the population, however due to the limited availability of data, many empirical papers using sex ratio at the population as a proxy for the terms of the marriage market. Similarly, the current ratio at birth is often used to predict future imbalances of the marriage market. Thus, a very simple measure in this direction is the sex ratio for selected age groups determined on the basis of most common classified ages for marriage for men and women. Looking at the sex ratio in Macedonia for 2012 for each five-year age groups, it is 107 for the age group of 0-4 in favor of males and drops to 105 for the age group of 20-29, when men and women typically marry. The same can be seen when we look at the sex ratio by large age groups for 2010 in the table above. This higher ratio for men certainly could disrupt the balance. The demographic imbalance means that starting in about 10 or more years later than 2012 as of 2022 and continuing further by 2030, there will be quite a lot of men at the age of marrying who could not find wives for themselves. Thus, there would be more men on the marriage market and a situation with a deficit i.e. insufficient number of women for them to marry. Considering that generally men marry younger women and knowing the fact that the mean age of marriage for men is higher than that for women²³ this could contribute in some way to a slight mitigation of such disadvantage for men on the marriage market. This situation where we have a greater difference between unmarried males and unmarried females according to separate age groups typical for marrying could be due in part to the delay of the age at first marriage by both women and especially by men and to the increased trend of cohabiting as more accepted form of first union among young people before marriage and thus breaking a traditional understanding of the marriage as an institution. Herewith of this assertion could be mentioned also the reduced trend in the number of marriages in Macedonia observed for more than ten years. For complete and more accurate understanding of the trend of unmarried women and unmarried men according to age groups and its implications on the marriage market in Macedonia, the proportion of single men and single women according to age groups is estimated and with the method of Hajnal are calculated the average age of marriage for the single persons. We assume that the force of nuptiality has been constant over time. Then each cohort would

²³ According to the estimates of the State Statistical office of the Republic of Macedonia the mean age at marriage in 2012 for men is 28.4 years and for women is 25.6, Source: Vital Statistics.

trace out the same history as every other cohort and the features of that history could be inferred by comparisons across the cohorts. This is the logic of the Hajnal's procedure²⁴. The Hajnal' method is typically applied in 5-year age interval. The proportion of single (never married) is defined at ages x to $x+5$ as:

$$5\Pi_x = \frac{5S_x}{5N_x}. \quad (1)$$

Person's years lived in the single state below age 50 could then be estimated by adding up successive values of $5\Pi_x$ and multiplying by 5, the number of years that the cohort will spent in each age interval:

$$PY^S(0.50) = 5 \cdot \sum_{x=0,5}^{45} 5 \Pi_x \quad (2)$$

This value could serve as an estimate of the mean age at marriage for the hypothetical cohort except that not all members of the cohort will have married by age 50.

$$\Pi(50) = \frac{1}{2} (5\Pi_{45} + 5\Pi_{50}) \quad (3)$$

He then calculates the mean age at marriage over the base of those who do in fact marry by age 50:

$$SMAM = \frac{5 \cdot \sum_{x=0,5}^{45} 5 \Pi_x - 50 \cdot \Pi(50)}{1 - \Pi(50)} \quad (4)$$

Those not marrying are excluded from the denominator and their person-years lived in a single state below age 50 are excluded from the numerator. *SMAM* is called "the singulate mean age at marriage" because it refers only to marriages occurring to the single population. In the table 7 below is illustrated computation of *SMAM* for Macedonian males and females in 2012. The value of *SMAM* is the mean age at first marriage for a cohort of men (or women) who marry by age of 50. The calculation of *SMAM* value from the current- status census data in a single census or survey assumes that the first marriage rates have been constant over time and that differences in mortality or migration rates by marital status are negligible. If rates have been changing, the value of *SMAM* is a hodge-podge of rates in the recent and more distant past.

²⁴ Preston Samuel H, Patrick Heuveline and Michel Gulliot (2001). *Demography: Measuring and Modeling Population Processes*: Oxford: Blackwell Publishers Ltd, p.88-89.

Table 7: Calculation of the average age for the first marriage for singles in Macedonia, 2012:

age	men			age	women		
	$5N_x$	$5S_x$	$5\Pi_x$		$5N_x$	$5S_x$	$5\Pi_x$
0	59853	59853	1.000	0	55725	55725	1.000
5	58282	58282	1.000	5	54861	54861	1.000
10	63848	63848	1.000	10	59873	59873	1.000
15	74287	73374	0.988	15	70032	68182	0.974
20	82371	76370	0.927	20	77756	60509	0.778
25	84126	57957	0.689	25	80250	33199	0.414
30	82120	27858	0.339	30	77497	12492	0.161
35	77259	12871	0.167	35	74771	4665	0.062
40	73897	7321	0.099	40	72369	3570	0.049
45	74382	5142	0.069	45	72417	2961	0.041
50	71581	2742	0.038	50	70110	1742	0.025

Source: Author's calculations

 $5N_x$ = Total population aged x to x+n $5S_x$ = Number of single persons aged x to x+n $5\Pi_x$ = 6,278 = proportion of single men at ages x to x+n

$$\Pi(50) = \frac{0.069 + 0.038}{2} = 0.0535$$

$$SMAM = \frac{5.6,278 - 50.0,0535}{1 - 0,0535} = 30.31 \text{ years for men}$$

 $5\Pi_x$ = 5,479 = proportion of single women at ages x to x+n

$$\Pi(50) = \frac{0.041 + 0.025}{2} = 0.033$$

$$SMAM = \frac{5.5,479 - 50.0,033}{1 - 0,033} = 26.62 \text{ years for women}$$

Since the Hajnal method depends entirely on proportions of singles, table 7 shows some reduction in the proportions remaining single for our country. In Macedonia the projected reduction in proportion of singles is smaller for men than for women. The reduction that appears to be taking place among Macedonian women expressed in percentages shows 11.15% remaining single in the age 30-34 and only about 5.55% at the age 35-39 as compared to 25.3% and 13.3% for men for the same ages respectively. The proportion single among men aged 45-49 exceeded the one of women by at least 30%. Proportion of women

remaining single throughout life is likely to remain below the corresponding proportion for men i.e in other words the results show that more men than women remain single in Macedonia. This difference between the sexes is probably largely due to recent changes in the age-sex composition of the populations concerned. The increased value of *SMAM* for men (30.31 years) compared to the *SMAM* value for women (26.62 years) in Macedonia for 2012 may be attributed to a “marriage squeeze” (an imbalance between marriageable men and women). Apart from this, as the mean age at marriage is a factor to be associated with the development of a society, the increases in the values of *SMAM* might have indicated the same. Economists in particular have been prominent in offering explanations for the relationships between growing economic independence (as a result of better education and improved career opportunities) and the increase in the delayed marriage and fertility. This is also supported by the results of TFR in Macedonia that has reduced from 2.2 in 1994 to 1.51 in 2012²⁵. The results of increase of *SMAM* are also evident in Macedonia. The later timing of marriage in terms of *SMAM* emerges clearly.

Conclusion

In the structure of the population by sex in Republic of Macedonia prevails the male population (masculinity 108). The population structure by marital status shows that the larger part of the population is married. Observed in 2002 and compared to 1994 a decline could be noted while there is also further decline in 2012, and when the number of the marriages compared from 2012 to the census year 1994 has decreased by 11.1%. With regard to the age, it can be concluded that in 2012 the most frequent age in Republic of Macedonia for women to get married is 25.6 years old. Men usually married at 28.4 years old, according to the estimates in 2012. It is obvious that in the census years and in the year with the estimates there are more married women than married men and this ratio ranged from 1.042 in 1994 to 1.023 in 2002 and 1.019 in 2012 on 1000 married men. The percent of the single population over 15 years from the total population over 15, according to 1994 census were 27,42% single men, in 2002 there were 29.83% and

²⁵ State Statistical office.

according to the estimates in 2012 reached to 31.72%, and the percentages for the single women in turn for the mentioned years respectively were: 18.52%, 20.78%, 23.15%. From 1994-2012 there was a certain increase in the percentage of single men and also an increase was observed for the single women. This increase was 4.3 percentage points for single men and 4.63 percentage points for the single woman about the mentioned period 1994-2002. The group of widowers-widows in the census 1994 and 2002 and estimate year of 2012 shows quite large differences by sex. In 2012 the total number of widowers was 22544, and of widows was 77955, indicating that widows have more than tripled. The percentage of divorced people from the total population by gender in 1994 is as follows: for divorced men 0.50%, and 1.23% for divorced women. In 2012 the percentage increased to 0.88% for men and there was a slight increase to 1.42% for women. As can be seen, in all three observed years in Republic of Macedonia there was more divorced women than men. In the minimum fertile marriageable contingent 25-49 approximately every fourth person of that age is not married in 2012. From the available data can be observed imbalance of the marriage market in Macedonia for 2012. The number of unmarried available males is almost twice bigger than those of the unmarried available females for the age group 25-29, and more than double greater for the age groups from 30-34, 35-39 and 40-44. This higher ratio in favor for men certainly could disrupt the balance. The demographic imbalance means that starting in about 10 or more years later than 2012 as of 2022 and continuing further by 2030, there will be quite a lot of men on the age for marrying and who could not find wives for themselves. Thus, there would be more men on the marriage market and a situation with a deficit i.e. insufficient number of women for them to marry. According to the calculations of Hajnal method on a data for single males and females for 2012 in Macedonia reductions in proportions singles is less for men than for women. The reduction that appears to be taking place among Macedonian women shows 11.15% remaining single in the age group 30-34 and only about 5.55% in the age group 35-39 as compared to 25.3% and 13.3% for men for the same ages respectively. The proportion single among men aged 45-49 exceeded the one among women by at least 30%. The increased value of *SMAM* for men (30.31 years) compared to the *SMAM* value for women (26.62 years) in Macedonia for 2012 may be attributed to a "marriage squeeze" (an imbalance between marriageable men and women).

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Professional paper

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**MACROECONOMIC ASSUMPTIONS FOR THE EMPLOYMENT
POLICY - AN OVERVIEW OF THE SITUATION IN THE
REPUBLIC OF MACEDONIA**

Abstract

The paper addresses the macroeconomic assumptions for the employment policy in the Republic of Macedonia. The main goal is to identify these assumptions as a base for creating favorable conditions for unemployment decrease. Providing sustainable economic growth is the key determinant for creation of new jobs and solving the unemployment problem. This growth requires macroeconomic assumptions such as: economic stability, favorable investment climate, flexible institutions on the labor force market to be achieved etc.

Regarding the unemployment problem in the Republic of Macedonia, creating the macroeconomic framework of the employment policy is a complex process that assumes mix of different sectorial policies, which should align their goals and objectives in order to achieve employment growth. The paper identifies possible activity directions of the monetary, fiscal and wage policy, as a set of core macroeconomic policies which have a direct and indirect impact on the employment growth.

The analysis in this paper leads to a conclusion that the achievement of sustainable growth and development of the Macedonian economy is a significant determinant to encourage employment in the future. It should be achieved through: maintaining macroeconomic stability, reducing the budget deficit, increasing the domestic and foreign

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investments, as well as investment in infrastructure, development of the real sector and increase of the competitiveness. Any successful policy in these areas would contribute to creating new, but also to maintain sustainability of the existing jobs in the country.

Key words: Labor Force, Unemployment, Monetary Policy, Fiscal Policy, Wage Policy.

JEL classification: J21, J64, E52, E62, J31

Introduction

The study of the characteristics and relevant socio-economic aspects of unemployment in the country showed that unemployment could not completely be analyzed in terms of main types of unemployment. Its causal conditionality is characterized as a developmental-structural unemployment, and as such, it is a complex and very difficult problem to solve. Therefore, the need to consider the possibilities for reducing unemployment by building a comprehensive employment policy is imposed. Within this paper, the attention is focused on identifying the macroeconomic assumptions and sectors of activity of the employment policy, as a basis for creating favorable conditions for reduction of the unemployment. Furthermore, the areas of action, measures and actions of the monetary, fiscal and wage policy, which have a significant effect on the reduction of the unemployment in the country, are identified.

Providing sustainable economic growth and development is a key determinant for the creation of many new jobs, and thus, for solving the unemployment problem. This growth requires certain macroeconomic assumptions to be accomplished, such as: economic stability, favorable investment climate and flexible institutions in the labor force market.

The economic policy has a significant impact on the labor market functioning. Regarding the employment, both fundamental economic objectives of a country are related to the creation and provision of macroeconomic conditions for accelerating the economic growth and formulation of operational employment policy. In modern terms, the process of globalization is imposing the need in the creation of the economic policy to consider the international macroeconomic conditions. Considering that the macroeconomic policy framework for employment

is a complex process that implies creating a mix of different sectorial policies, which should align their goals and objectives in order to achieve increase of the employment, this paper identifies the possible actions of the macroeconomic policies, which have a direct and indirect impact on the employment growth.

1. Some theoretical aspects of the macroeconomic framework for the employment policy

The establishment of the macroeconomic framework for the employment policy is a complex process because it presupposes creating a mix of different sectorial policies, which should align their objectives and strategies in order to achieve employment growth. The brief review of the three macroeconomic policies (fiscal, monetary and wage policy), aims to indicate their impact on the employment.

The fiscal policy plays a key role in defining the overall economic framework and the scope of measures and activities in the economic policy area. If the country wants to aim the fiscal policy at increasing employment, the focus should be put on stabilizing the macroeconomic framework, providing a solid and sustainable budget policy and establishing efficient regulatory and audit bodies. The aim is to reduce the budget deficit to a level that is acceptable in the long term, i.e. to a level that allows the future interest and repayments to be covered by state revenues. In the field, however, of the taxes and customs, as a part of the financial policy, there should be taken measures that will enable support of the new investments and development of the small and medium enterprises (SMEs). The effects in terms of the employment can be achieved only with the set of comprehensive specific goals. For example, a reduction or omission of taxes for starting new businesses or for creating new jobs can be introduced.

In order to reduce the unemployment, the fiscal policy can achieve positive effects by reducing taxation. This policy would be effective in the sense that the reduction in taxation theoretically should increase consumption, that is, part of the increased available personal income (due to lower amount of taxes paid) to be spent on buying goods and services. However, if the unemployment is structural or friction, which is often long term, then it is better to use the policies that will

influence the supply side of the labor force. This means that fiscal policy can be used as a short-term solution to reduce the unemployment.³

In the formulation of the monetary policy⁴, in order to increase employment, the inequality of short-term and long-term goals should be taken in consideration. Thus, in the short term, when the potential GDP of the country is underused, the monetary expansion has a positive effect on the aggregate employment, because it means lower interest rates, which stimulates consumption and investment. At the same time, this expansive monetary policy tends to spur the inflation and distort the price stability. Higher rates of inflation are undermining the function of the prices and increase the uncertainty about the future decisions regarding the purchase of durable and capital goods. In long-term, this situation is increasing the negative effects on the employment.

The exchange rate policy, i.e. the policy of fixed exchange rate, without tying the national currency with an international currency, can have a significant impact on the aggregate employment. With the nominal devaluation of the domestic currency, i.e. by increasing the nominal exchange rate, the domestic goods become cheaper abroad and foreign ones become more expensive at home. It increases competitiveness of the national exporters and domestic producers, which increases demand for domestic products. If the production factors of the country are underutilized, it will cause a rise in aggregate employment.⁵

Regarding the wage policy, it is important to point out that salaries are the main expense of labor as a factor of production, but at the same time they are a household income, which increases their consumption power. The amount of the wage depends on productivity. The higher growth of wages compared to productivity growth can lead to inflation increase, what respectively can have a negative impact on employment. If employers fail to overcome the increased labor costs by raising prices, their profits and their interest to invest will decline. It will cause reduction of international competitiveness of the country, which

³<http://www.markedbyteachers.com/as-and-a-level/economics/discuss-the-effectiveness-of-a-fiscal-policy-in-reducing-unemployment.html>

⁴ Frenkel Roberto and Taylor Lance, *Real Exchange Rate, Monetary Policy and Employment*, DESA Working Paper No.19, ST/ESA/2006/DWP/19, February 2006, p.1-9.

⁵ Kausch I., Trommershäuser S., *Strategies for Employment – Labor-market and Employment Policy in Developing Countries and Countries in Transition*, GTZ, Eschborn, 2002, p.27.

consequently will reduce the number of jobs in those sectors that produce goods which are sold on the markets abroad.

In many countries, the concept of minimum wage is used as instrument of the social policy. The goal is to determine the lower limit of salary, which will provide a decent standard of living to the lowest paid workers. However, in terms of large labor supply, this concept may cause problems. In that case, the wages lose their function as a mechanism to align the supply and demand, which can lead to deterioration of the unemployment and underemployment.⁶

The importance of the abovementioned policies indisputably confirms the complexity of macroeconomic policy framework for employment, and the need to coordinate their goals and directions of action, for achieving employment growth.

2. The importance of accelerating economic growth

In the contemporary conditions of globalization, the Macedonian economy is functioning as an open market economy, in which the basic preconditions for development are based on: increased investment activity and competitiveness, use of highly qualified labor force, infrastructure development and use of modern communication and information technology. The Republic of Macedonia, in order to achieve higher employment rates, should intensify economic growth, encourage domestic and foreign direct investments, maintain macroeconomic balance and stability of the national economy and increase competitiveness.

The data presented in the table below refer to the economic growth rate, employment and unemployment rate in the Republic of Macedonia, regarding the period from 1999 to 2013. In the Republic of Macedonia there are the periods of positive economic growth. However, economic growth does not always cause positive changes in employment (Table 1).

⁶ ILO, Global Wage Report 2008/09, *Minimum wages and collective bargaining - Towards policy coherence*, Geneva, 2008, p.33-36.

Table 1:

Economic growth rate, employment rate and unemployment rate in the Republic of Macedonia, 1999-2013

Year	Economic Growth Rate	Employment Rate*	Unemployment Rate**
1999	4.3	40.2	32.7
2000	4.5	40.3	32.5
2001	-3.1	42.6	31.1
2002	1.5	40.4	32.4
2003	2.2	38.5	37.1
2004	4.7	36.8	37.4
2005	4.7	37.9	37.6
2006	5.1	39.6	36.3
2007	6.5	40.7	35.2
2008	5.5	41.9	34.0
2009	-0.4	43.3	32.3
2010	3.4	43.5	32.2
2011	2.3	43.9	31.6
2012	-0.5	44.0	31.2
2013	2.7	46.0	29.2

* Employment rate is calculated as participation of the employed (15-64) in the working-age population (15-64)

** Unemployment rate is calculated as participation of the unemployed (15-64) in the labour force (15-64 години)

Source: State Statistical Office of the Republic of Macedonia, Labour Force Survey, no. 2.4.06 (1999), no.2.4.1.03 (2000), no.2.4.2.08/410 (2002), no.2.4.3.13/453 (2003), no.2.4.5.02/494 (2004), no.2.4.6.07/531 (2005), no.2.4.8.06 (2007), no.2.4.9.12/632 (2008), no.2.4.10.04/651 (2009), no.2.4.11.09/692 (2010), no.2.4.12.11/727 (2011), no.2.4.10.04/651 (2012), no. 2.4.14.04/779 (2013), Statistical Yearbooks 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012 and 2013., Statistical Review National Economy and Finance, 3.4.14.04/793 (2014), Gross Domestic Product - New Release no. 3.1.14.06 (2014); National Bank of the Republic of Macedonia, Quarterly Report - Statistical Appendix IV/2009, IV/2010, IV/2011, IV/2012, IV/2013 and IV/2014

As a result of the military conflict in 2001, the period of positive economic growth was terminated. The economic growth rate in 2001 was negative (-3,1%). From 2002 till 2008 the period of economic recovery followed. The rate of economic growth varies from 1,5 % in 2002 to 6,5% in 2007. This is the highest rate of economic growth that was realized in the Republic of Macedonia in the period from its independence until today.

Moreover, a special interest in consideration arises from the employment rate. The aforementioned dynamics of the economic growth rate causes very small and insignificant changes in the employment rate

in the Republic of Macedonia. The positive increase in the employment rate is evident in 2001, which started slowly to decrease in the following years (40,4 % in 2002, 38,5% in 2003 and 36,8 in 2004). After five years of continuous economic growth period, the employment rate have started to increase. The highest level of employment in the past period is achieved in 2013 (46,0)%.

These changes in the employment rates are expected because of the trend of a slight increase in the national GDP growth rate, but primarily are a result of the institutional and legal changes made in the field of the employment in the recent years. As important factors for the increase in the employment, also are: the changes in the Employment Law, the introduction of the gross wages concept and fiscal policy measures that reduce the percentage calculated and paid for social security contributions on employees' wages. Another aspect is the active government programs for self-employment. These measures resulted with an increase in the employment rate in the period 2009-2013.

Regarding the decrease of the unemployment, Republic of Macedonia needs long-term continuous economic growth which will be accompanied with higher increase of the real sector as a creator of new jobs and increase of the competitiveness. The practices show that more significant effects in the employment can be expected only with sustainable economic growth in the longer run, and that those effects usually are manifested after the fourth year.

Macroeconomic indicators confirm that higher economic growth rates are realized in terms of the investments increase. Regarding the limited financial capital in the country in the last decade, the attention of the economic policy creators was focused on the increase of the foreign direct investments, as one of the main preconditions to achieve more dynamic economic growth. Basic prerequisites for attracting foreign direct investments are: political and macroeconomic stability of the country, favorable business environment, infrastructure development and credibility of the government policy.

On the other hand, the use of restrictive monetary and fiscal policy in the recent years has enabled the achievement of macroeconomic stability in the Republic of Macedonia. But this stability does not endure economic growth. The last financial and global crisis caused recession in the whole world. The growth of the jobless disturbed the established macroeconomic stability, and that made Republic of Macedonia more

risky country for foreign investors. Therefore, political instability is another important factor that discourages FDI.

In that manner, numerous measures and activities were taken, but the results have remain relatively modest. Although, the investment policy is based on equal treatment of the domestic and foreign investments, it seems that state aid to domestic companies is relatively lower, especially if real investment opportunities are considered. In that sense, the suggestion is to force direct help with the budget funds to the companies from the real sector, in order to enforce the real sector development and the creation of new jobs.

In parallel with the activities of fostering economic growth in Republic of Macedonia, it is necessary to undertake more serious measures to increase competitiveness as an important assumption of encouraging the export and to decreasing the trade deficit of the country. In this context, very important subject is the policy of transfer of technology, particularly of the information technology.

Investments in infrastructure are also important prerequisite for increasing competitiveness of the national economy and for investment increase. Through these investments, higher economic growth and balanced regional development should be achieved, which can promote employment and reduce poverty and social exclusion. According to the planned capital expenditures, public investments in the country aim at: energy, road, railway and utility infrastructure, improvement of education and health care conditions, as well as improvement of quality of infrastructure in the social, cultural life, as well as in the sport.

Therefore, one can conclude that it is necessary to achieve sustainable economic growth and development of Macedonian economy, as a significant determinant to encourage the employment, especially to contribute in creating new, but also in maintaining sustainability of the existing jobs in the country.

3. Fiscal and monetary policy

The state fiscal policy is a key factor in defining the economic framework and the volume of actions available for the economic policy. A number of developing countries, not excluding the Republic of Macedonia, are facing budget deficits, which more or less, are financed

by expanding the money supply or by using the funds that are available from the bilateral and multilateral cooperation.

The implementation of the fiscal policy reforms in the Republic of Macedonia is a good basis for creating an environment to support SMEs, creating new jobs, attracting FDI. All these measures and actions are aimed at reducing unemployment in the country. In order for fiscal policy to support the economic growth, it is necessary to maintain a controlled budget deficit at a moderate level of about 2%-3% of GDP, which will be used for the realization of capital investment projects, primarily in transport, energy, utilities, education and health infrastructure. If the state wants to use the fiscal policy to improve the situation in the field of employment, it should be focused on stabilizing the macroeconomic framework, providing a solid and sustainable fiscal policy. In addition, measures that will affect the scope and structure of the income and expenditures in the budget, and which directly and indirectly contribute to the employment growth, should be taken. In that sense, a system of taxes and contributions should be designed not to burden the labor factor too much. This goal can be achieved if the tax is more focused on consumption rather than on production. However, taxation of consumption should be selective in order to minimize the negative distribution effects.

Lowering taxes and tariffs can be used to attract more foreign direct investment or to promote SMEs. In general, primary benefit from this reduction will be the creation of low-skilled jobs. However, the use of this instrument has an opposite effects in the sense that it leads to profit outflow, while at the same time, the added value of production is very low. So, in terms of encouraging employment, such tax and customs benefits should primarily be directed to the domestic SMEs. In order to achieve significant effects in the field of employment, these benefits should be linked to specific targets of the employment, for example, temporary tax breaks for new businesses or lower taxes for creation of new jobs.

The Republic of Macedonia uses different combination of measures to stimulate economic activity and to increase and diversify the investments. Particularly significant are fiscal incentives that attract foreign direct investments. At the same time, fiscal measures which are used to encourage FDI are: different types of tax incentives, special customs measures and the establishment of institutions that provide information, legal and organizational support to foreign investors.

The projection of the budget revenue of the Republic of Macedonia is based on the realized revenues in the current year and projected macroeconomic indicators for the next period (expected economic growth, employment, inflation, wages and other relevant variables).⁷ Regardless of that, in order to achieve the consolidation of the budget, efforts should be focused on increasing tax revenue by expanding the tax base by one, and to improve the efficiency of tax collection, on the other hand.

In terms of budget expenditure, the attention of the fiscal policy should be aimed at increasing public investment particularly, the investment in infrastructure, and to provide basic social services (health care, education, gaining professional qualifications, etc.). The investments in the infrastructure are more than necessary, but require large spending. Regarding this, positive experiences of using public-private partnership, through which the infrastructure projects can be implemented efficiently and with less budget, should be used and promoted. However, reduction of government spending for such investments, in the short term, causes decline in aggregate demand and incurs job losses.

Expenditure side of the budget for the time it is designed to support the recovery of the Macedonian economy and overcoming the consequences of the crisis period. For this purpose, tighter control of current expenditures and a significant increase in capital expenditures for investments in infrastructure projects is provided. During the projection of the expenditures in the country, especially in the segment of the salaries and allowances, it is necessary to continue with the strict control of new hires and postponed wage increases in order to stabilize the general economic conditions and to complete the consolidation of public finances. Regarding current expenditures, full and timely payment of pensions and social security benefits, as well as providing social welfare of the beneficiaries of these rights, should be allowed.⁸

Monetary policy is a potential control instrument that can affect the labor market. In the creation of the monetary policy, the central bank faces two problems. The first refers to the conflict of the short- and long-term effects on the employment. Namely, on short term, when the aggregate output of the country is under-used, the expansion of the

⁷ Ministry of Finance, *Fiscal Strategy of the Republic of Macedonia 2011-2013*, December 2010, p.12.

⁸ Ibid., p.13.

money supply has a positive effect on the aggregate employment, because it means lower interest rates which stimulate the household consumption and the investment by businesses. However, this expansive monetary policy tends to increase the rate of inflation and thus jeopardize the overall price stability. The higher inflation rate on one side has an influence on the prices, and on the other, it creates uncertainty in the decisions to purchase durable consumer and capital goods, which on long term increases the negative effects on the employment.

The second problem of the monetary policy is the management of the central bank, because it is very difficult to predict the intensity of the real economic effects and the time of their occurrence. Countries in transition have additional problems in that direction, because of the lack of relevant data and statistics, but also because of the imperfection of the money market and capital market. Therefore, these countries often refrain to use the monetary policy to achieve the objectives of the labor market. Their central banks are focused on maintaining the price stability, while the expansion of the money supply is mainly directed towards the development of the overall production potential of the country.

In this sense, the monetary policy in the Republic of Macedonia is aimed at maintaining price stability, which is the main objective of the Central Bank. Setting this goal is consistent with the empirical findings, which confirm that the price stability creates the most favorable macroeconomic environment for long-term sustainable economic development. Thus, maintaining the stability of the exchange rate is the intermediate target of the monetary policy. For achieving the price stability, as the primary objective of the monetary policy, the Central Bank has different monetary instruments. Regarding that, the exchange rate policy of the country should provide competitive prices for Macedonian products, an increase in their demand and greater engagement of the labor force.

4. Wage policy

Wage policy is a very important prerequisite for the functioning and development of the labor market. The salary is a major expense of the labor as a factor of production, but it is also a household income that increases their power consumption. The amount of the wage depends on the productivity and represents an important determinant of the labor

force performance. Therefore, the dissatisfaction of the wages results in a decline of the labor productivity. In fact, the increase in wages in the country should be directed to the development of the aggregate productivity. The determination of the wages above the level that provides productivity growth, may cause a change in the ratio of the labor earnings and the profits, or may lead to an increase of the inflation rate. In both cases, it can create problems in the employment area, expressed in unemployment increase and underemployment. Namely, if the employers fail to overcome the higher labor costs with higher prices, their profits and new investments will decline. On the other hand, if the higher costs are covered by the higher prices, it would cause a drop in the international competitiveness of the country, which will lead to cutting jobs in the sectors that produce trading goods.

Besides determining the average wage levels, another important factor for the employment is the wage differentiation, which should be done in accordance with the sectorial and regional factors, as well as with the factors related to the qualifications level. This will allow low-skilled workers, despite their low labor productivity to find employment. However, the wage policy that is in favor of the employee groups with low pay, can be counterproductive in achieving the objectives of the employment policy. Thus, more logical solution for these categories is to provide certain tax releases or relief from some contributions, which will ensure that they are going to earn enough income for a decent life. Trade unions and employers' associations have an important role in the negotiations to determine wages in different sectors and industries. Determination of wages in the country can be characterized as a decentralized process. Public wages are determined by collective bargaining at sectorial level, while the wages in the private sector are mainly defined by bargaining between employer and employee.

In the country there are informal practices of wages in the formal sector. Those are undeclared wages, which mainly comprise the so-called "envelope wage". It means that employers officially pay the minimum wage and report their employees with the minimum wage, which is then supplemented with additional salary paid in cash (which is not reported). This practice has a negative impact on the public finances, i.e. it reduces the tax and social contributions, and consequently have unfavorable impact to the social security and pensions for workers.

Regarding this situation the persistence of the grey economy in the country is evident. Also, the number of the employees that are hired

and paid like freelancers is very high. Therefore, recently the changes in the Law on contributions for compulsory social insurance were adopted.⁹ These changes predict that on the income derived by performing physical and/or intellectual work based on contractual agreements or on copyright agreements, and other agreements in which the net amount is higher than the amount of the minimum wage established by law, shall be calculated and paid pension insurance contributions (17,6%), compulsory health insurance (7,3%) and personal income tax (10,0%). It is expected that this law changes will minimize the informal employment and the grey economy.

Relatively high taxes, which are representing the difference between gross and net wages, are discouraging the process of opening new jobs. Over the past decade, one of the reasons for employment increase is due to the changes in the tax system. The ratio between the actual gross and net salary has dropped from 1.76 in 2000 to 1.69 in 2001, when a progressive system of personal income tax (PIT) with two separate tax rates (15 and 18 percent) was introduced. In 2007, a system of flat PIT and income tax with a fixed rate of 12 percent was introduced. Later, in 2008, the flat rate was further reduced to ten percent, which resulted that the growth rate of the net salary for the first time to be higher than the growth rate of the gross salary. This suggests that the reduced rate of personal income tax was used to increase the workers' salaries, rather than to reduce the labor costs. The relation was further reduced in 2009, with declining rates of social security contributions.¹⁰

In terms of the wage settings it is very important to strengthen the social dialogue at bipartite level - the level of branch and enterprise – and at three partite level - through the Economic - Social Council. Through the tripartite dialogue a higher level of negotiations should be provided, which will protect the vulnerable groups of workers, while through bipartite negotiations, the focus should be on the specifics of the branch or the company. Improved social dialogue can contribute to the further elaboration of mechanisms for determining salary which are inefficient and give poor results.

More countries in transition are using the minimum wage as an instrument of the social policy. The goal is, with the determination of the

⁹ The Public Enterprise Official Gazette of the Republic of Macedonia, *Law on contributions for compulsory social insurance, no.20/2015*, from 12.02.2015.

¹⁰ Blazevski M. Nikica, *The influence of the crisis to the wages in Former Yugoslav Republic of Macedonia*, ILO, Budapest, 2011, p.30.

minimum wage, to ensure that workers with low incomes will have an acceptable standard of living. However, in terms of the higher labor supply, minimum wage settings can cause problems. This means that wages are losing their function as a mechanism for adjusting the supply and demand of the labor and can cause an increase in unemployment and underemployment.

The effects of minimum wage functioning regarding the employment in the country can be positive or negative. The existence of the minimum wage in the economic system is of a particular importance for workers on low-profile jobs. This wage needs to improve their standard of living and to increase the efficiency of their working positions, leading to improve of the general productivity. As a result, the positive effect of the minimum wage introduction will be seen in the growth of consumption in the economy. But on the other hand, the legal obligation of the employer to increase the salary of some of his employees, may also lead to the abolition of (part of) such jobs. The literature mainly empirically is verifying this effect: a decrease of one to three percent of the employment in low productive jobs in terms of minimum wage growth of an additional 10%. However, subsequent findings argue that this effect is significantly reduced, but remained negative, and that this negative effect is particularly expressed in countries that have nonregulated or less regulated labor markets. An alternative way to compensate for the negative impact of setting the minimum wage is for the employer to increase the prices of his products, which on the other hand can lead to inflation in the economy.¹¹

In Republic of Macedonia, the minimum wage was introduced in 2012 and it was 8.050 MKD, while since January 2015 it's been 9.590 MKD, and is a result of the agreement of the three social partners – the Government, employers and Unions. Considering that the amount of the minimum wage is the result of mutual agreement, it is currently the maximum amount that does not jeopardize the jobs of the workers. Benefits of the introduction of the minimum wage in the country are: increasing the living standard of the poorest and most vulnerable segments of society, motivation and encouragement for employees to work more, stimulating the consumption and increasing the work ethic, reducing the gray economy, as well as providing material and social security for workers.

¹¹ Petreski Marjan, *Minimum wage determination – Brief for the public policies in Macedonia*, Center for Economic Analyses – CEA, p.11-12.

Salaries represent household income which increases their consumption power. In the Republic of Macedonia wages are relatively low and for a longer period are not corrected according to the increase of the life expenditures. That has influence on the continuous reduction of the aggregate consumption, and thus on the dynamics of economic growth and employment increase. Therefore, we consider that it is necessary to introduce a specific dynamics of the wage increase, both in the state and in the private sector, which should be higher than labor productivity growth. This should stimulate the consumption, increase the production and create opportunities for new jobs.

Conclusion

Achieving sustainable economic growth and development is a key determinant for boosting employment and thus alleviating the problem of unemployment in the Republic of Macedonia. This should be achieved by maintaining macroeconomic stability, reducing the budget deficit, increasing the domestic and foreign investments, as well as the investments in the infrastructure, by dynamic development of the real sector and increase of the competitiveness. Successful policies in these areas would certainly contribute to the opening of many new jobs, but also to the sustainability of the existing employment in the country.

Fostering economic growth and development should be accompanied by creation of the macroeconomic framework for employment policies. It is a complex process that implies creating a mix of different sectorial policies, which should align their objectives and strategies to achieve employment growth. For this purpose, the paper identifies possible directions of activity of the main macroeconomic policies (fiscal, monetary and wage policy) that have a direct and indirect impact on the employment growth.

The study confirms the importance and possibilities of action of each of the macroeconomic policies aimed at increasing employment. However, it is noted that the success of the employment policy expressed by the growth of employment is conditioned not only by appropriately defined goals, measures and activities in each of the aforementioned policies, but also in their compliance in order to achieve the stated objectives of the employment policy.

Regarding the importance of accelerating economic growth, it can be concluded that changes in the employment rates in the Republic of Macedonia are expected because of the trend of a slight increase in the GDP growth rate, but primarily are a result of the institutional and legal changes made in the field of the employment in the recent years.

Republic of Macedonia uses different combinations of measures to stimulate economic activity and to increase and diversify investments. Particularly significant are the fiscal incentives that attract foreign direct investments. Fiscal measures which are used to encourage FDI are: different types of tax incentives, special customs measures and the establishment of institutions that provide information, legal and organizational support to foreign investors.

The relatively high taxes, which represent the difference between gross and net wages, discourage the process of opening new jobs. Over the past decade, one of the reasons for employment increase has been a result of the changes in the tax system. In 2008 the personal income tax was reduced to ten percent, which resulted that the growth rate of the net salary for the first time to be higher than the growth rate of the gross salary. This suggests that the reduced rate of personal income tax was used to increase the workers' salaries, rather than to reduce the labor costs.

The other measure of the wage policy is the concept of minimum wage, whose benefits are: increasing the living standard of the poorest and most vulnerable segments of society, motivation and encouragement for employees to work more, stimulating the consumption and increasing the work ethic, reducing the gray economy, as well as providing material and social security for workers.

All the proposed measures of the macroeconomic policy suggest that in the process of drafting the employment policy in the Republic of Macedonia, all the measures and actions should be taken in accordance with the principles of flexibility and security, with strengthening of the active labor market policies, promoting lifelong learning and modernizing labor legislation and social security systems.

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THE TECHNOLOGY STRATEGY OF TRANSNATIONAL COMPANIES

Abstract

The subject of the paper is the technology strategy of transnational companies. In the terms of globalization, transnational companies have the main role in global development, innovation activities and in technology transfer. Because of that, the success of transnational companies depends on the choice of transnational strategies. At the beginning, the aspects which should be taken in consideration are analyzed, together with the conditions for choosing the determined strategy. After that, the phases of technology transfer are explored.

From the many technology strategies, the strategy of research and development and the strategy of diversification are specially analyzed.

The aim of this paper is to show the big influence of technology strategy of transnational companies over the host economy, together: the external and internal.

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.

Key words: transnational companies, technology strategy, technology transfer, research and development, diversification.

JEL classification: F23, F25, O19, L1

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Introduction

In the terms of globalization, transnational corporations (TNCs) have the main role in reaching global growth and development. They are the main engine of globalization and internationalization. Transnational companies consist of a group of geographically dispersed organization parts which act together and are oriented to various goals.

Each part can be founded like an internal network which is built in an external network together with all other organizations, such as consumers, suppliers, regulative. All these parts of TNCs must collaborate.

TNC are an important factor in the transfer of contemporary technology and contemporary processes.²The biggest 500 TNCs are the leaders in the world business.

When choosing a particular strategy, TNCs have to consider the following:

- The position of their own market and the life cycle of the technology used,
- The position of the competition in the same market and
- Macro environment (social and political) in the country which appears like a buyer.

TNC has a main role in innovations and in the growth of productivity. In this context, it is important to understand which types of innovation activities foreign TNCs located in their own country and which in other countries.(Alan M.Rugman, 2007:4).

Research shows that in the base of the formulation of strategies of TNCs is the knowledge management, which can be used outside the home country.³ To select an appropriate technology strategy, a capacity for combining internal, external, local and international technological knowledge is necessary. With combining these four types of knowledge it is possible to get larger effects of innovation activities. (John Cantwell, 2010: 6).

For successful functioning of the TNCs, the strategies of research and development and the diversification strategies have great importance. (Oscar Franklin, 2010: 39).

² OECD. 2008. *Guidelines for Multinational Enterprises*. p.10.

³ Mark Lorenzen, Volker Mahnke. (2002), "*Global strategy and the acquisition of local knowledge: How MNCs enter regional knowledge clusters*", Copenhagen/Elsinore, 6-8 June, p.2.

1. Strategy of research and development

The strategy of research and development is the basic component for long life development of the companies. Especially, the activities of TNCs in research and development are significant, respectively 98% from 700 leading companies in research and development are TNCs. They have 69% share in the total research and development business. Some of them, such as: “Ford”, “Daimler Chrysler” and “Siemens”, individually invest in research and development more than the total costs of some developed countries like: Spain, Switzerland or Israel. Certainly, their growth in innovation activities is not concentrated only in the home country, but also in external activities.

For example, according to the research done in 30 countries (developed and developing), the share of foreign companies in total investments in research and development in the monitoring country has grown from 10,3% in 1993 to 15,9 in 2002. In Ireland, Hungary and Singapore that share of foreign companies reached 50% from total investments in research and development of those countries.⁴

Table 1: Strategies of research and development

Strategy	Technology
Strategy 1	Oriented to foreign direct investments in research and development
Strategy 2	Use the host's strengths for investments in research and development
Strategy 3	Focusing technology in company with technology advantage at home and in the host country
Strategy 4	Market oriented technology strategy concentrated on foreign direct investments

Source: Adapted by Christian Le Bas, 2007: 3-9.

With the focus on location of activities of research and development, a simple matrix is developed. In this matrix, the strengths and weakness are taken in consideration, according to foreign direct investments and research and development, based on the characteristics of the domestic country, also including the technology of domestic companies.

⁴ D. Castelani, A.Zanfei. (2006) “*Multinational Firms, Innovation and productivity*”, Edward Elgar Publishing Inc. p.1.

Based on these aspects, four types of strategies are defined, shown in Table 1 above:

These strategies are explained as follows:

- Strategy 1: The first strategies are oriented to foreign direct investments in research and development. This type of strategies is oriented to neutralizing the weaknesses of the domestic country of a particular kind and in particular field of technology. This is realized by choosing a host country with proven strengths in the desired technology.
- Strategy 2: This type of strategies use the domestic strengths for investing in research and development. These are completely opposite strategies to the first ones. The focus is to invest home, but to use the existing corporative specifics in foreign environment, especially in regions that lack in the particular technology field.
- Strategy 3: This type of strategies are focused on technologies in the company which has technology advantage home and in the host country. These type of strategies correspond to dynamic learning. The companies take into account time which is necessary to build their own technology capital.
- Strategy 4: These are the market oriented technology strategies which are oriented to foreign direct investments in research and development. These respond to the situations in which companies invest in technology activities outside their home country. The home country lacks these technologies, but no more than the foreign country. In other words: there are no technology advantages, neither in the home country, nor the host country. These strategies are not technology oriented and they are mostly result of mergers and acquisitions.

2. Diversification strategies

Diversifications strategies are used in the following situations:

- When there is a risk of reducing the growth in the existing business,
- When there is a possibility of enlarging in the industries which technologies complement the existing business and

- When the TNC has a famous name and intends to transfer in another business.

Table 2: Characteristic of diversification strategies

Object of diversification	Characteristic
Location	Production in various countries
Technology	Various technology
Manufacturing	New technology lines
Multinational	New products with new technologies at new locations

Source: Jiatao Li Deborah R. Yue, 2008:670- 672.

From the diversification strategies we will mention the strategies in the Table 2 above. These strategies are characterized with the following:

- Diversification of the location of manufacturing. These strategies are strategies for internationalization of manufacturing, i.e., locating the manufacturing in various countries.
- Technology diversification. These strategies keep the same products, but manufacture them with various technologies.
- Manufacturing diversification. These strategies represent manufacturing the products with new technology lines, but with the same technologies.
- Strategies for multinational diversification. These strategies enable the manufacturing of new products with new technologies at new locations.

Table 3: The activities of the transnational company EVN Group

Production	Grid infrastructure Austria	Energy trade and supply	Supplying of Southeast Europe	Environmental services
Heat energy	Regional electricity and natural gas grids	Electricity supply and primary energy sources	Electricity grid and sales (BG and MK)	Drinking water
Hydropower	Cable TV/ Telecom networks	Wholesale and retail	Production and sales of heat energy (BG)	Waste water
Wind		Production and heat sales	Gas grid (Croatia)	Waste burning
Other			Trade energy (Southeast Europe)	
Austria, Germany, Albania and Bulgaria	Austria	Austria and Germany	Bulgaria, Croatia, MK and Serbia	Austria, Croatia, Cyprus, Denmark, Estonia, Germany, Hungary, Latvia, Lithuania, Montenegro, Poland, Slovenia, Slovakia and Turkey

Source: <http://www.evn.at/SpecialPages/Kapitalerhoehung/Prospekt.aspx>

As an example of a TNC, the company EVN is analyzed. As a transnational company, EVN uses a multinational diversification strategy, i.e., activities that are located in various countries.

In the Table 3 above, the activities in various segments and countries of acting of EVN Group are presented.⁵ The multinational strategies of EVN Group are analyzed, as follows:

⁵ <http://www.evn.at/SpecialPages/Kapitalerhoehung/Prospekt.aspx> p.2.

The production of energy from thermal power plants and from renewable energy resources predominately is located in Austria and in Germany, through the Production segment. Apart from Austria and Germany, EVN Group is involved in the distributive network in Macedonia and Bulgaria, through the Segment for supplying with energy of Southeast Europe. Through the Service segment, EVN Group participated in activities for drinking water supply and for industrial needs in Southern Austria and in 14 countries. With its strategy, EVN Group is a famous brand in many energetic fields in Europe.

The increase or decrease in the technology diversification always has a trend of increasing or decreasing of funds for research and development. It confirms the importance of an active process of technology diversification.

3. Technology transfer

The role of TNC in technology transfer is especially important. The transfer of technology enables direct access to modern ways of production and knowledge. In a commercial sense, the transfer of technology provides documentation, knowledge, experience or equipment under determined conditions to the technology buyers. It can include one or more stages of production or stages in the selling process.

When choosing a technology, subjects can use home or foreign sources of technology. The home sources encompass the own research resources of technology users or research achievements of other home researches, which are primary concentrated in research institutes at high education institutions. TNCs have the main role of connecting systems in the transfer of technology. .

The most important ways of transferring technology are: licenses, joint ventures, production cooperation, carrying out investment activities and franchises. (Zlatka Popovska, 2000: 446-448).

For the Macedonian economy, joint ventures have the greatest importance in development. Joint venture is an investment of two or more business entities in a new or existing company where the partners together invest capital, manage the company and divide the profit. The influence of joint venture and their motives can be analyzed from the foreign and the home partner.

In the literature the following phases in technology transfer are accented (Petra Kranikikj, 2006, p:6):

- Phase 1: Defining the needs;
- Phase 2: Defining the criteria for assessment of solutions;
- Phase 3: Analyzing of technical solutions;
- Phase 4: Selecting an optimal technology;
- Phase 5: Negotiations for technology transfer;
- Phase 6: Establishing the contract for technology transfer;
- Phase 7: Technology supplying;
- Phase 8: Implementing the technology; and
- Phase 9: Redefining the needs.

The research shows that with the transfer of technology the TNCs enable bigger mobility of employers at the various locations. High levels of loyalty and greater motivation are also achieved in this way.

4. The effects of TNCs on the domestic economy

The influence of the TNCs on the domestic economy is very big. There is no dispute that TNCs increase the level of technological dependence, especially in the case of less developed countries. At the same time, TNC also fulfill significant positive effects such as the following:

- Transfer of technology;
- Reserve the additional recourses for many countries;
- Reserve the knowledge transfer for local citizens;
- Enable development of international market standards.

The effects of TNCs on the domestic economy can be grouped in two groups: internal and external. (D. Castelani, A.Zanfei. 2006:173-174).

On one hand, in most parts TNCs have bigger productivity and greater affinity for innovation and research and development than the domestic companies. Because of that, every time when a foreign or home multinational company enters or enlarges the activities in a particular state, they directly influence the characteristic of the economy.

On the other hand, TNCs have an external effect on the input – the surviving and performances of the rest of the companies in the country. Theoretical research suggests that the TNCs produce profit, both in money and in knowledge.

These external effects can be grouped in four main ways, as follows:

- Competition,
- Imitation and demonstration,
- Workforce mobility, and
- Flows and connections.

Many practical experiences prove that the network effect on the TNCs is evident. The results of research of some Italian companies indicate that an important improvement can be reached by transferring the production facilities in another country.

The influence of internal and external networks, which are needed for innovative activities, is very important.

It is known from experience that for a successful realization of any technology strategy, the connection of three systems: technical, political and social is needed. This is possible to achieve with the three managerial instruments: mission and strategy, organizational structure and management of human resources. There is a need to assess what kind of change for each system is necessary.

Conclusion

In globalization terms, TNCs dictate the development of contemporary processes. It can be concluded that TNCs with their activities carry the main role of internationalization of the world market.

It is particularly important what kind of strategy TNCs will choose, because that will dictate the entire development. The comprehensive analysis of strengths and weaknesses in the environment should be done, the life cycle of products in the host country, also in the countries where TNC have subsidiaries.

With the transfer of technology, TNCs reserve bigger mobility of the employers to the many locations, rationalizations, bigger loyalty and bigger motivation of employers.

The strategy research and development are basic components for long life company development. The highest percent, 98% from 700 leading companies in research and development are TNC and they share 69% from the total business in research and development.

The diversification strategies are used in the following cases: When there is a risk of reducing the growth in the existing business, when there is a possibility for enlarging in the industries whose technologies complement the existing business and when the TNC have a famous name and want to transfer in another business.

After adopting a particular strategy, the connection of three systems: technical, political and social must be done with managerial instruments: mission, organizational structure and management of the human resources.

The influence of external and internal networks has a big influence on the domestic economy and on the global growth and development, in general.

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Professional paper**

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**THE PRACTICE OF ISSUING SECURITIES BY MACEDONIAN
COMPANIES AND THE NECESSITY FOR ESTABLISHMENT
OF INVESTMENT BANKS IN MACEDONIA**

Abstract

The objective of this paper is to analyze how often Macedonian enterprises issue securities on the primary capital market in order to raise funds for capital funding and business expansion. The analysis of the amount of issued securities by the companies is presented, in total, annually for the period 2007-2012. The reasons why enterprises in Macedonia do not issue securities for raising capital is also explained. In the final part of the paper it is explained how establishment of investment banks will affect the development of the primary capital market in the country.

Key words: securities, primary capital market, establishment, investment banks.

JEL: G23

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Introduction

The primary capital market is financial market in which a company sells newly issued long-term debt instruments and shares to the investors. Its main function is to finance long-term investments of companies and government. The benefits of the companies from issuing securities on the primary capital market are: possibility of mobilizing money resources for long-term financing, increasing popularity, increasing sales, possibility to engage specialized staff and achieve better results in working, etc.

One of the main questions is: how Macedonian companies finance their long-term projects with issuing securities. A research was made using the datasets of Securities and Exchange Commission for total value on annual issue of securities in the period 2008-2012. The analysis of data helped in explaining the reasons why companies in Macedonia are uninterested to issue securities. As main reasons, the following are detected: insufficient knowledge of companies and individual investors on the capital market, transparency, change in ownership structure, small number of institutional investors, high interest rates, illiquidity of the secondary capital market and deficiency of financial instruments and institutions.

The primary capital market should function effectively; this is essential for economic development in order to connect successful and not as successful economic entities.

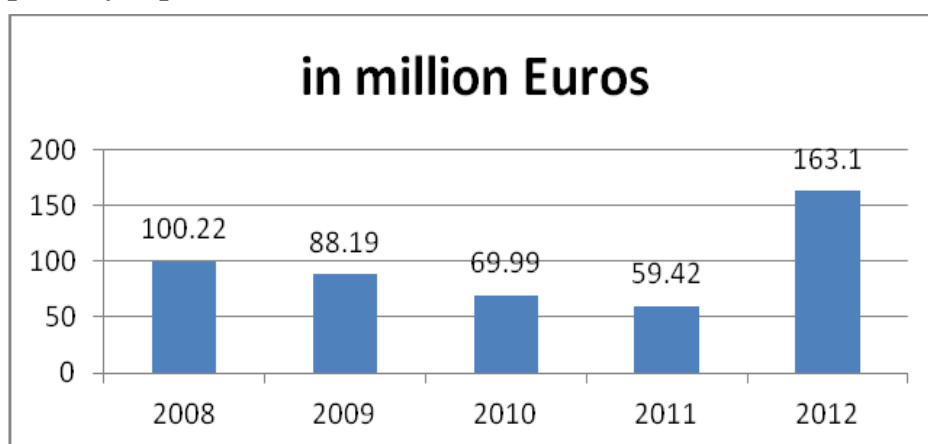
1. Financing of Macedonian companies with issuing securities

The practice of mobilizing money funds for new investments by issuing securities on the primary capital market in Macedonia is very modest. The issuing of securities is limited with the provision of additional capital only from existing shareholders through private placement. Private placement indicates that the situation in the companies is favorable and the existing shareholders are interested in increasing their participation in the additional capital, which is believed to bring more profit. Therefore, existing shareholders are not interested in expanding the number of shareholders. There are situations where the companies need additional capital, but the managers do not believe that

the issuing of securities can be realized because investors do not trust companies and their plans.²

The total annual value of approved issuing of securities on the primary capital market in Macedonia for the period between 2008-2012 is presented on graphic 1.

Graphic 1: The value of approved issuing of securities on the primary capital market



Source: Author's calculations

In 2008, 22 requirements for issuing securities with the total value of 100,22 million Euros, and one requirement for issuing of long-term debt securities – corporate bonds were approved. The same year, the first public offer of corporate bonds in Republic of Macedonia was warranted. The issuer of these bonds was NLB Tutunska Banka, AD Skopje. The total value of this issuing of bonds was 12 million Euros, i.e. 12 000 bonds with nominal value of 1000 Euros. This issuing of bonds was realized with a success rate of 88,86% i.e. NLB Tutunska banka AD Skopje mobilized 10,66 million Euros by sale of 10 663 bonds. Most of the bonds were purchased by two banks. Also, it is important to note that in 2008, approximately 90% of the total issuing of securities was made by financial institutions, and the remaining 10% were issued by other economic companies.³

² Shajnoski K.: Macedonian stock exchange boom in 2005 – fiction or reality, Vlabor, Skopje, 2006 pp.24.

³ Annual report for the work of the Securities and Exchange Commission of the Republic of Macedonia, 2008.

In 2009, a total of 7 requirements for issuing of securities in total value of 88.19 million Euros were approved. All 7 requirements approved were realized with private placement. It is noted that in relation to 2008 there was significant reduction in the number of requirements for issuing securities. The value of all requirements in relation to 2008 decreased by about 21.41 %. Out of the total value of issued securities 95% were issued by non-financial companies.⁴

For 2010, the number of requirements for issuing securities is 6, with total value of 69.99 million Euros. Five of the total issued securities were private placements. In relation to 2009, the number of requirements was reduced. The value of total issued securities was reduced by about 20,5% in relation to 2009. Out of the total issued securities, 70% were by companies which are not financial.⁵

The following year (2011), 11 requirements for issuing securities with total value of 59.42 million Euros were approved. Subject of all requirements was issuing shares. From the total approved issues of shares, 8 were private placements and 3 were public offers. In relation to 2009 and 2010, the number of the requirements for issuing securities was increased. The value of the totally issued securities was reduced by about 14,78% in relation to 2010 and 32,25% in relation to 2009. Out of the total issues of securities, only 3% were issues by companies which are not financial.⁶

In 2012, the Securities and Exchange Commission approved 16 requirements for issuing securities with total value of 163,1 million Euros. The subject of all requirements was issuing shares. There were no submissions of requirements for issuing corporative bonds. From the total of 16 requirements, only one was realised with public offering and the other 15 were realised with private placement. The value of issued securities was increased by 174%, in relation to 2011 and by 134% in relation to 2010.⁷

Besides the fact that in 2009 non-financial companies were the most active issuers of long-terms securities in the Republic of

⁴ Annual report for the work of the Securities and Exchange Commission of the Republic of Macedonia, 2009.

⁵ Annual report for the work of the Securities and Exchange Commission of the Republic of Macedonia, 2010.

⁶ Annual report for the work of the Securities and Exchange Commission of the Republic of Macedonia, 2011.

⁷ Annual report for the work of the Securities and Exchange Commission of the Republic of Macedonia, 2012.

Macedonia, they show small interest in financing their activities by issuing of securities. Non financial companies are oriented to receiving financial support from the commercial banks.

2. Why Macedonian companies are not financed by issuing securities?

The Macedonian capital market is relatively small. The reasons for this situation can be found in: the lack of tradition in investment of securities, the size of the economy, relatively low accumulation of power, limited offer of financial instruments, investors' motives of short-term profit, absence of foreign investors and other factors.⁸

2.1. Knowledge of the capital market in Macedonia

Insufficient knowledge of the economy entities for the functioning of capital market and features of particular securities leads companies to borrow money from commercial banks. The main reason for that is the low level of education within the companies which need money, and also low level of education of investors which invest in securities and want additional earnings.

The deposits of citizens in Macedonian commercial banks are not operational. Money savers usually invest their excess liquidity in low-risk investments or deposit their money in banks to earn interest. Citizens rarely invest in shares because they are not confident and uneducated. Individual investors also do not have confidence in the company's management. Sufficient entities avoid investing in shares because of higher risk, not considering that higher risk implicates higher gains.

A number of companies cannot assess conditions for financing because they do not know the conditions for issuing securities through public offers or private placement. Companies also do not know which information are needed to be published in order to mobilize capital by issuing securities.

⁸ Report for the work of the Central Securities Depository JSC Skopje 2012.

2.2. Transparency as an obstacle

Companies that issue securities by public offers have an obligation to inform the public for their operations through publication of annual, semestral and current reports. Despite this obligation for informing, there is a possibility for companies to be excluded from the obligation of publishing certain information in accordance with the regulator, if publication of such information may cause serious endangering of significant business interests of the company.⁹

The possibility for companies to mobilize funds through issuing shares or long-term securities directly depends on whether the issuer of securities will provide the public with complete, correct and in-time information, which hold essential significance for investors to make a decision. Without quality information, investors cannot assess profitability with long term securities and cannot make a decision for trading with some securities.¹⁰

The transparency of the market of securities in Macedonia is the key for a competitive market. One of the ways for channeling in-time information to investors on the capital market is through the module for reporting joint stock company with special obligations for reporting, which is available to the public through the web site of SEC. The register of joint stock companies with special obligations for reporting, represent solid database for joint stock companies in which securities investors are interested.¹¹

Despite these obligations for informing, companies in Macedonia which publish these information timely and completely are rare. A lot of companies with shares listed on the Stock Market present the annual financial statement later, and in their income statements they do not present data for the income per share. Companies which present statements and plans for the next year are rare. Also, companies do not prepare programmes for development in medium term. The management of the companies in Macedonia does not understand that in-time and correct information is good for the business.¹²

⁹ Public offering of securities: Guide, Macedonian Stock Exchange, Skopje, 2013 pp.12.

¹⁰ Shajnoski K., Miteva-Kacarska E.: „The influence of the media to the interest of trading securities,,

¹¹ Annual report for the work of the Securities and Exchange Commission of the Republic of Macedonia, 2012.

¹² Shajnoski K., Miteva-Kacarska E.: „The influence of the media to the interest of trading securities,,

The managers of the companies in Macedonia are conservative regarding to publishing information. The possibility to mobilize capital through issuing long-term securities and shares necessitate constant publishing of financial statements and information important for share price formation. In-time information for the public is a foundation for functioning of the primary capital market. Companies in Macedonia have insufficient awareness of appropriate and correct financial information of the issuing, which is basic for healthy financial decision of potential investors. Sometimes it seems that managers are not interested to publish even positive information. This means that the phase of ownership consolidation is not overcome and the purpose of it is to keep share prices on low level in order to make them available to stakeholders.

Also, it is necessary to provide much more information on data for income statement and balance sheet of companies which are listed on the Stock Market, especially companies which are part of Macedonian Stock Index - MBI - 10. If investors have all important information for the companies, when companies issue new securities it will be easier and cheaper to mobilize new capital. Increased level of transparency will increase the interest of potential investors and will encourage new issue of securities. This will lead to increase of source of funding of the company and possibility for development of the total activity.

2.3. Possibility to change the structure of ownership

The owners of the companies in Macedonia are interested in achievement of total control of the ownership. Issuing shares as a way for mobilizing capital leads to division of the ownership.

Domestic joint stock companies are not interested in issuing new shares as a most recommended way to mobilize capital, which should be used for development of companies. The resistance of dominant owners of joint stock companies in Macedonia is incomprehensible to mobilize capital in this way, taking into account the advantages, which are offered with it, against the borrowing loans from commercial banks. One of the main reasons for this is the fear of the dominant shareholders (owners) that with the issue of new shares the actual shareholder structure would change because of the possible acquisition by the interested investors.

Private placement is the most common practice regarding issuing shares in Macedonia, but the public offers are very rare. If the company is open to the public, there is a possibility of risk for its acquisition by the

investors, which acquired the control package. In the case of more profitable company owners have interest to provide the necessity of capital with previously agreed placement of issue, and not with public offering of securities, because the owners want to avoid changes in ownership structure in Joint Stock Company. The owners of the companies are in dilemma: way to finance the company with issue of shares and whether issue of shares and inclusion of more shareholders will split the profit. The way of decision-making will also become more complicated.

2.4. Institutional investors at the Macedonian capital market

The institutional investors are very important for the primary capital market. They contribute to the effectiveness of the markets. Institutional investors are organizations which buy most of the securities at the financial markets. Different from the individual investors, they can disperse the risk through diversified structure of investments. Institutional investors may affect the prices and other market conditions with their size and knowledge. They buy large amount of securities and their existence on the capital market has positive effects on their prices.

There is low interest from the foreign institutional investors. The reasons are found in the illiquidity of the Macedonian Stock Exchange, which makes unattractive conditions for investments. Without development of the primary capital market i.e. without usage of shares and bonds as one of the major sources of funding, besides loans, the capital market will simply not be interesting for institutional investors. On the other side, their absence from the Macedonian Stock Exchange means smaller volume of trading and lower liquidity of the securities. This implicates low prices of the securities i.e. price which is lower than their book value. Knowing that the prices of shares are on low level, company with purpose to provide necessary capital should sale greater number of shares i.e. derogate majority of the ownership.

However, the most important reason for the absence of institutional investors at the Macedonian capital market is the legislative related to restrictions for investment funds.

2.5. High interest rate and offer of classic bank instruments

The price of capital is the most important factor when deciding for financing. On one side, interest rate affects the company's profit and on the other side it affects the economic activity. Either way, economic activity affects the company profit. In the Republic of Macedonia, in conditions when bank sector freezes loan to private companies, they do not try to mobilize capital by issuing securities. Obviously, companies are prepared to pay high interest rate for financing their business ventures with goal to block the entry of new shareholders.

In Macedonia, although the interest rates are on the relatively high level, companies are financing through borrowing in banks rather than issuing securities. This can be explained with the impact of the interest rate to the securities. Interest rate affects the price of securities as a result of their impact on the profit. On the other side, the impact of interest rate to the price of shares can be seen through the competition on the markets of shares and bonds. If interest rates are higher, investors can get higher yield on the bond market. This forces the investors to sale shares and to switch funds from share market to bond market. Massive sale of the shares as an answer of the high interest rate, obviously depreciate the prices of shares. Knowing that in Macedonia the interest rates are high, the interest to deposit resources in bank is bigger than interest for investing in shares. Low demand leads to formation of share prices on low level, so if one company wants to finance through issue of securities it should derogate most of its ownership

2.6. Illiquid secondary capital market

Secondary capital market performs two significant functions. First, it allows easier and faster sale of financial instruments i.e. it makes the financial instruments liquid. Increased liquidity of financial instruments makes them desirable and this enables issuers to sale easier on the primary capital market.¹³ Secondary capital market also determines the prices of securities, which are prices of the sale on the primary market. Investors who buy securities on the primary market will not pay for them higher price in relation to the price on the secondary market. If the price is high on the secondary market, issuer will achieve

¹³ Mishkin F.S.: "The Economics of Money, Banking, and Financial Markets", Business School Edition (2nd Edition) Hardcover – Large Print, July 25, 2009, pp.27.

higher price for new securities on the primary market, and greater volume of capital will be mobilized. That means issuer will achieve greater volume of capital with issuing less number of shares and lower part of the ownership will be derogated.

Shares on the secondary capital market in Macedonia are underestimated, the turnover is falling steadily and interest of the investors, especially foreign, is small. The reports show continuous decline in turnover.¹⁴

Table 1: Review of total turnover of Macedonian Stock Exchange 2007-2012

Year	Currency	Total turnover
2007	€	682.000.000,00
2008	€	202.060.000,00
2009	€	109.830.000,00
2010	€	94.980.000,00
2011	€	221.940.000,00
2012	€	91.000.00,00

Source: Author's calculations

On the secondary capital market in Macedonia there is a small percent of foreign investors. Large percentage of individual investors and owners of companies are afraid or consider unnecessary to finance through primary capital market.

The symbiosis between primary and secondary capital market is necessary. In the moment, for the low liquidity, market register price jump or fall, if one group of investors decide to buy or sale some securities in value of 20-30 thousand Euros. In conditions of absence of liquidity, acquisition from some of the bigger Macedonian companies would be welcome. More important, this will mean determination of real value of companies in Macedonia.

¹⁴ Report for the work of the Macedonian Stock Exchange, JSC Skopje for 2007, 2008, 2009, 2010, 2011, 2012.

2.7. Shortage of financial instruments and institutions

The issue of securities by the companies in Macedonia is in form of issuing shares and bonds. Macedonian capital market has small variability in relation to the type of financial instruments. The dominant financial instrument, which is used by the companies in purpose to mobilize capital, is shares.¹⁵

Companies in Macedonia are not interested to mobilize capital through issuing securities because on Macedonian Stock Exchange it is possible to trade only with shares and bonds. There are no financial instruments to increase the liquidity, and financial derivatives, which can be used for absorption of the risk. The lack of offering new financial instruments only increases the passiveness of the capital market. On the Macedonian capital market there are almost no issues of corporate bonds, which are important for attraction of new investments. The main reasons why corporate bonds are favorite instrument for borrowing in relation to bank loans, are the lower interest rates and the possibility for paying of the principal at the end of the period of maturity, or possibility for early redemption.

The capital market in the Republic of Macedonia is relatively inefficient and underdeveloped due to several reasons. In conditions when there is no developed trading on the secondary market with basic types of securities (shares and bonds), the absence of trading with their derivatives is expected.

Namely, until thinking or popular behaviorism dominates, and the thesis that nothing is worse than risk (risk is highly correlated with yield), we cannot discuss for efficient market, one in which it will be expected to have increase of trading or development of new financial instruments.

3. Necessity for establishment of investment banking

Investment banks act as brokers on the primary capital market. They search for investors who buy securities that are directly issued by the companies. The following question is important for the investment banks: Do companies have well developed and quality business projects

¹⁵ Goluboski Z., Jovanovski P.: "Annual review of the Belgrade, Bulgarian and Macedonian Stock Exchange", 2008.

and business ideas which will be attractive for the public i.e. for the investors.

On the securities markets, public offers in the most cases are realized simultaneously with underwriting. Investment banks purchase the emission, they obligate to purchase shares from the issuers at pre-agreed price, then resale shares in order to make difference in price, or obligate to purchase all unsold shares from the emission of the issuer.

There are no investment banks in Macedonia which mainly have role to help companies and government institutions to mobilize capital through issue of shares and bonds in their initial phase and which have quality business plan.

Creating conditions for establishing investment banks will also create conditions in our economy to develop new financial instruments, which will be engaged and exploited from the investment banks, such as financial derivatives. Therefore, priority of our economy should be the development and stability of small and medium sized companies, which will be one of the main catalysts of the activities on the primary capital market. This will draw necessity for formation of investment banks which will mediate in the activities related with securities on this markets and will achieve bigger concurrency on the capital market through increase of the number of financial instruments and introduce financial innovation.¹⁶

With the increase of the number of investment possibilities, introducing a new financial instruments increases the number of participants on the financial market through stimulating domestic companies to finance their activities through issuing securities. Key challenges for further development of the capital market will be the attraction of foreign investors.

The process of integration in the EU is essential factor for creating conditions for establishment of investment banks, which also includes development of the financial derivatives and their markets in the Republic of Macedonia. Knowing the characteristics of the Macedonian financial market, it is necessary to immediately undertake measures, which will provide its stability and create conditions for establishment of investment banks.

¹⁶ Lekoska I.: "The necessity and possibilities for development of investment banking in Republic of Macedonia".

Conclusions

Canalization of funds makes better economic situation for everyone in the society. The primary capital market provides funds to move from economic subjects who do not have productive investment possibilities to subjects who have. Canalization of funds has direct positive impact on the final expenditure.

Companies in Macedonia provide capital resources for long-term financing, mostly from banks, and not from issuing securities. In Macedonia, the number of issuances of securities is small and they are often categorized as private placement. The main reasons for this is the fear of shareholders from new investors. Issuing securities as private placement shows that companies do not use the capital market as source of financing their projects. So far, the capital market in Macedonia was used as an instrument for concentration of bigger share of ownership, rather than mobilizing capital for long-term investments. In this way, it seems that management and existing shareholders want to keep the price of shares on low level, which makes that company non-transparent, thus achieving to buy bigger ownership package with small level of money resources. This results with weak liquidity, weak capitalization of the market and bigger risk for foreign investments.

The low level of liquidity, the poor supply of securities, difficulties in change of attitude are the reasons why investors are uninterested for investment in securities. The problem mainly can be located in high interest rates. In the few past years interest rates in Macedonia have been declining, however in relation to the European countries, Macedonian economy has high interest rate. High interest rate implicates that money resources are put in banks as deposits and the demand for shares is low. This results with low price of shares and the shares are undervalued in relation with their book price. If one company is financing by issuing shares, it should sell bigger number of shares to provide capital resources and derogate bigger share of ownership. Therefore, development of capital market is needed through monetary-fiscal mix with the purpose of stabilizing the rate of inflation and the low interest rate.

Initial public offers should be leading, and not alternative way of financing, especially of those companies which have possibility of fast development. The situation of the capital market in Macedonia and usage of bank loans from the companies impacts the competition of

Macedonian economy, higher price of capital and low level of economic development.

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Katerina FOTOVA CIKOVIC¹⁾

COMPARISON OF THE MACEDONIAN AND CROATIAN BANKING SYSTEM

Abstract

The Republic of Macedonia and the Republic of Croatia have both been federative republics in the ex-SFRY federation until 1991. Both countries received their EU candidate status in 2007 and Croatia approached the European Union in July 2013, whereas Macedonia has retained the candidate status. This is why many people believe that both countries have so much in common. Considering this fact, it is a great challenge to try and elaborate on their differences in the banking systems, besides the first impression that there are many shared similarities of both countries.

The subject of this research are the banking systems in both countries, their performances, profitability, and efficiency during the past decade. The banking sector in each country is a very specific and crucial segment in the economy, especially in such bankocentric economies present in both analyzed countries.

The main objective of this paper is to stress the fact that even though originating from the same country, both republics have developed under different circumstances and thus, there are inevitable differences in their banking systems and their (under)development.

Other objectives of this paper are to emphasize the differences in order to clarify the areas and the reason why the Republic of Macedonia (or, its banking system) shows lower performance, and where the performance is better and could be used as an example in other countries further on in the future.

The main hypothesis in this study is: Even though both countries seem to be relatively similar regarding all the sectors of the economy,

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their banking sectors are showing differences in performance, efficiency and structure of the financial systems. Is the Macedonian banking system efficient compared to the Croatian? What lessons could be learned?

The methodology used in this research is historical, comparative and analytic method.

The findings were consistent with the hypothesis. Both banking sectors have similarities, but they also differ in their structure as well as the structure of the financial systems. The Macedonian banking system has not showed extraordinary results in the past decade, and has better performance than the Croatian one *only* in the past 2 years. However, the performance indicators do not indicate that the banking system has developed. It rather shows the struggle the Croatian banking system is facing due to the 7th year of recession. The main conclusions of this research have shown that the Macedonian banking sector has not been efficient enough, and a consolidation of the sector is needed in order to stimulate more efficient operations.

Keywords: Republic of Macedonia, Republic of Croatia, banks, banking system, comparison.

JEL Classification: G21, O57

Introduction

In this paper, the main goal is to objectively analyze the two countries' economies, with a special accent of the banking systems in order to come to a conclusion which both Macedonian and Croatian banks could benefit from, regarding the best practices in the sector.

Both Republic of Macedonia and Republic of Croatia share quite many similarities regarding the economy and the financial institutions.

The comparisons could be started with the fact that Republic of Macedonia participates in the world GDP with 0,01%, whereas the Republic of Croatia with 0,06%.²

When analyzing the financial system of a country, it should be outlined that it comprises the currency, the payment systems, the financial markets, the financial institutions and the supervising

²<http://www.nationmaster.com/country-info/compare/Croatia/Republic-of-Macedonia/Economy>

institutions and regulators.³

In Croatia, the commercial banks hold the dominant position in the financial system. Same as in the Republic of Macedonia, the supervision and regulation of the commercial banks is done by the Central bank - Croatian National Bank and National Bank of the Republic of Macedonia, respectively. However, the difference in this segment is that the banks in Macedonia have almost absolute domination over other financial institutions on the market, which points out the underdevelopment of the financial system. Nonetheless, both countries could be classified as bankocentric countries.

The Croatian National Bank (HNB) as well as the other central banks of the EU members do not hold legal mandate and authorisation to *directly* affect the financial stability of the country. However, the achievement and sustaining of the stability of the Croatian financial system is number one priority in the operations in the same system. In this sense, the strategy of the National Bank of the Republic of Macedonia includes sustainment of price stability and economic subjects' expectations of a stable inflation. Therefore, they both share the same objectives and they have the same interest - financial stability.

Banking systems in the Republic of Macedonia and the Republic of Croatia

At a first glance, it seems that the Croatian system consists of more banks than the Macedonian: there were 29 Croatian commercial banks and 15 Macedonian commercial banks in 2014. However, the difference is much bigger in this segment when the number of mergers and acquisitions on the Croatian market is considered. According to the Croatian National Bank, the Croatian banking sector has started with 43 banks in 1993, creating 60 banks in 1998 and 1999, thereafter starting and embracing consolidations in this sector.

The data in table 1 show a relatively similar situation in the Macedonian banking sector, where the decrease of the number of commercial banks started from 20 banks in 2005 to 15 banks in the previous 2014.

However, further consolidation of the banking sector is to be expected due to the fierce competition on the market, the globalized

³ http://www.hnb.hr/financijska_stabilnost/hfinancijska_stabilnost.htm

market and the high growth of the technological developments. The consolidation of the banking sector would enable banks to gain higher efficiency through economies of scale and diversification of the assortment of products and services offered.

Table 1: Number of banks in Republic of Macedonia and Republic of Croatia

Number of banks	Republic of Macedonia	Republic of Croatia
2005	20	34
2006	19	33
2007	18	33
2008	18	34
2009	18	34
2010	18	33
2011	17	32
2012	16	31
2013	16	30
2014	15	29

Source: Data from NBRM's and HNB's annual reports

The number of employees in the banking sector has also shown differences in both analysed countries. The Macedonian banking sector holds dramatically lower number of employees when compared to the Croatian banking sector, considering the fact that the number of banks active on the market is relatively equal. Thus, it could be concluded that the Macedonian banks offer smaller range of services, thereby have lower need for human capital in this sector.

Table 2: Number of employees in the banking sector in the period of year 2007-2012

Number of employees in the banking sector	Republic of Macedonia	Republic of Croatia	Number of employees in the banking sector as % of total population	Republic of Macedonia	Republic of Croatia
2009	6084	21730	2009	0,29451502	0,51057331
2010	6052	21770	2010	0,29296596	0,51151316
2011	6011	21865	2011	0,29098123	0,5137453
2012	6026	21639	2012	0,29170735	0,50843515

Source: Data from NBRM's and HNB's annual reports

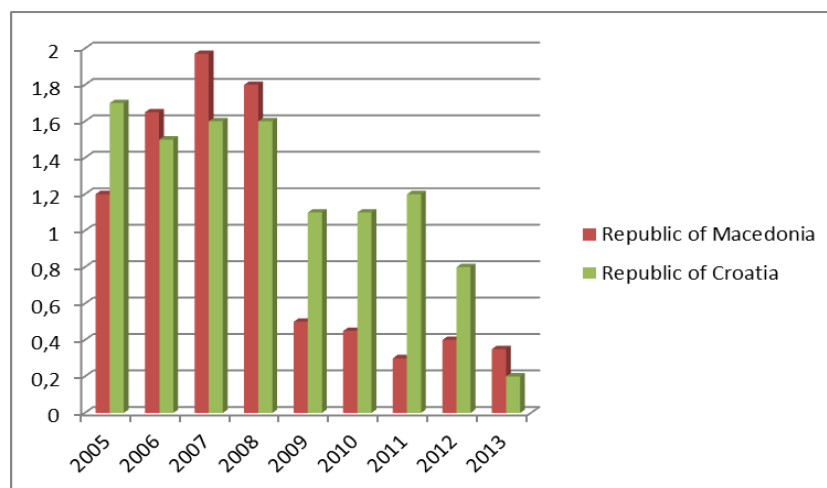
The most crucial difference between the financial segments of the two countries is actually the regimen and the maintenance of the exchange rate of the Macedonian denar and the Croatian kuna. The Croatian National bank pursuits a fluctuating regimen of the exchange rate of their kuna, whereas the National Bank of Macedonia has been using a strategy of targeting the stable nominal exchange rate of the denar regarding the euro, which is the biggest difference in the way the monetary policy is led.

When actually analysing the performances and the efficiency of the banking sector of a country, it is inevitable to analyze the ROAA (Return on Average Assets) and ROAE (Return on Average Equity) parameters. They give the most objective evaluation of the profitability of the banking sectors all around the world. The analyzed data have shown some very interesting facts regarding the profitability of the banking sectors in Macedonia and Croatia.

According to tables 3 and 4, as well as graphs 1 and 2, the ROAA rate has been increasing and showing higher efficiency in the years 2005-2008. The year 2007 is considered to be the “golden year” for the Macedonian banks due to the best performances of the banks. However, as a result of the Global financial crisis and the time lag, it has manifested its consequences – ever since 2009, the ROAA rate has decreased dramatically. Even though Croatian banks have shown higher ROAA until 2013, the long recession of the economy has had a

consequence of itself. So, even though the ROAA of the Macedonian commercial banks is currently higher than the one of the Croatian, it does not give an objective and neutral evaluation of the performances and efficiency of the banking sectors.

Graph 1: ROAA for both countries from 2005-2013



Source: Data from NBRM's and HNB's annual reports

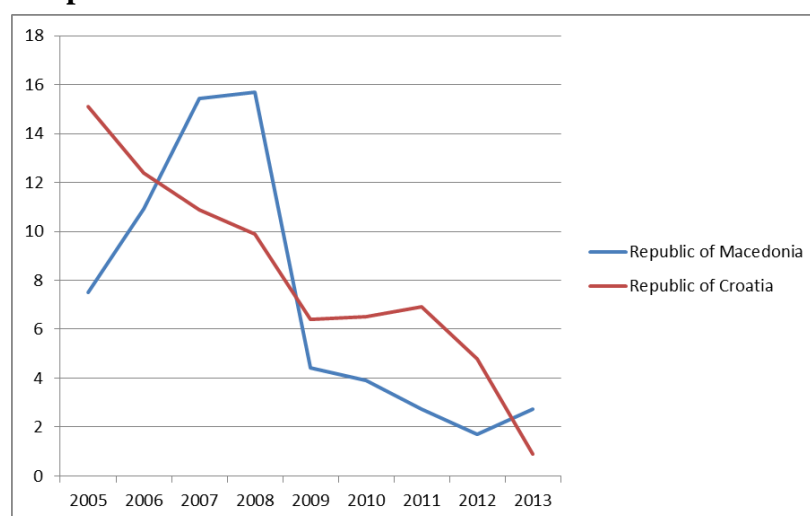
Table 3: The ROAA of Macedonia and Croatia in the period of 2005-2013

ROAA	Republic of Macedonia	Republic of Croatia
2005	1,2	1,7
2006	1,65	1,5
2007	1,97	1,6
2008	1,8	1,6
2009	0,5	1,1
2010	0,45	1,1
2011	0,3	1,2
2012	0,4	0,8
2013	0,35	0,2

Source: Data from NBRM's and HNB's annual reports

When analyzing the ROAE, the data of the Croatian banking sector was decreasing ever since 2005, starting with 15,1 and closing 2013 with 0,9. In the Macedonian case, the ROAE was increasing until 2009, when the consequences from the global crisis appeared. The first sign of improvement of this ratio for Macedonian banks came in 2013.

Graph 2: ROAE for both countries from 2005-2013



Source: Data from NBRM's and HNB's annual reports

Table 4: The ROAE of Macedonia and Croatia in the period of 2005-2013

ROAE	Republic of Macedonia	Republic of Croatia
2005	7,5	15,1
2006	10,92	12,4
2007	15,45	10,9
2008	15,7	9,9
2009	4,42	6,4
2010	3,9	6,5
2011	2,75	6,9
2012	1,7	4,8
2013	2,75	0,9

Source: Data from NBRM's and HNB's annual reports

The profitability of the banking sector in Croatia has been decreasing in the past few years due to the recession of the economy, *but* also due to the significant cost of regulations, followed by the growth of the interest rates on the global market. Many economists and academics are worried that the recession would take its toll on the profitability and efficiency of the banking sector in the country, which has actually happened. This effect is seen through the fast growth of bad loans and the growing risk premium because of the lower creditworthiness of the companies in the economy. Banks are left with no other solution than to write-off the due-to-default loans, to allocate more and more reservations and to do impairment.

This analysis gives the answer of the main reasons of the decrease of the profitability of Croatian banks, which is a decrease of the net-interest revenues (as a result of the higher increase of interest costs rather than interest revenues) and an increase of the reservations for the due-to default loans.

Even though the ROAA and ROAE rates are still positive, and despite the recession the country is facing, it is expected that these rates will continuously decrease as a result of the difficult operating conditions and the small opportunities to invest in state securities. However, the decrease of the absolute numbers of these ratios does not affect the stability of the Croatian banking sector, taking in consideration the fact that the profit is not the main buffer of the crisis, but the high level of capitalisation of the Croatian banks.⁴

The data shown in table 5 regards the capital adequacy rates of both analyzed countries. This data leads us to a very interesting conclusion: the Republic of Croatia has a very high capital adequacy rate and according to the press release issued by the Croatian National Bank on 26.10.2014⁵, the whole banking sector has a high rate of capitalization, which enables banks to have a sufficient and adequate security against potential losses, and resistance to stress.

In comparison, the banking sector of Macedonia has also successfully maintained its stability and security according to the stress-tests and analysis made by the National Bank. This decreases the potential risks of overflow in the other segments of the financial system.⁶

⁴ http://www.hub.hr/sites/default/files/hub_analize_broj_19_-_profitabilnost_banaka.pdf

⁵ <http://www.hnb.hr/priopc/2014/eng/ep26102014.pdf>

⁶ NBRM, Financial stability report for the Republic of Macedonia in 2013, July 2014

Macedonian banks have retained their liquidity and solvency thanks to their conservative approach in the operations and their aversion to risks. They are still very cautious when applying different politics, especially with their corporate clients. However, the effects of the prolonged crisis on the quality of the loan portfolios were inevitable and inescapable. In July 2013, the NPL's rate of Macedonian banks reached its maximum. In the first few months of 2014, this rate was slowly decreasing, but it is still quite high.

The NPL's rate of the banking sectors in 2014 was 13,2% and 15,4% for Macedonia and Croatia respectively.⁷ The logic behind these numbers is the following: Macedonian banks have a lower rate of non-performing loans in their portfolios when compared to the Croatian banks. It is due to the relatively conservative approach of the banks and their aversion to risks and financing projects without sufficient collateral.

Table 5: Capital adequacy rate in the period of 2005-2013

Rate of capital adequacy (%)	Republic of Macedonia	Republic of Croatia
2004	23	15,33
2005	21,3	14,62
2006	19,4	13,98
2007	17,52	16,36
2008	15,67	15,16
2009	16,45	16,43
2010	16,45	18,78
2011	16,7	19,55
2012	17,275	20,89
2013	14,6	21,05

Source: Data from NBRM's and HNB's annual reports

⁷ Data from www.nbrm.mk and www.hnb.hr (Annual, semi-annual publications of the National banks)

Comparison of the main aspects of the financial and banking sector

A real overview of the differences and similarities of both financial and banking sectors in the analyzed countries could be achieved through a grid depiction, such as the following table.

Table 6: Main characteristics of the banking sector in the Republic of Macedonia and the Republic of Croatia

CHARACTERISTICS	REPUBLIC OF MACEDONIA	REPUBLIC OF CROATIA
Banking sector (depository institutions) consists of:	Commercial banks and saving houses (whose importance and number was decreasing during 2013 as a result of changes in the Banking Law)	Commercial banks, saving houses, saving banks, credit union and housing saving houses
Non-banking sector (non-depository institutions) consists of:	Insurance brokerage companies, leasing companies, investment funds, pension funds, companies intermediating in insurance, brokerage houses, financial companies	Insurance companies, leasing companies, investment funds, pension funds
Number of licensed banks on the market	15 banks (3 of which belong to the big banks' group, 7 are middle-sized and 5 are small banks), 11 of which are in dominant foreign ownership.	35 credit institutions, 29 of which are banks, 1 saving bank and 5 housing saving houses. Out of the 29 banks, 15 are in dominant foreign ownership, 12 in domestic private ownership, while 2 are in domestic state ownership. Six of them belong to the big banks' group, three to the middle-sized banks and 20 to the small banks' group.
Employees in the banking sector	6.048 employees until 31.12.2013	21.454 employees until 06/2013

CHARACTERISTICS	REPUBLIC OF MACEDONIA	REPUBLIC OF CROATIA
National currency and exchange rate policies	<i>Macedonian Denar (MKD)</i> Strategy of targeting stabile nominal exchange rate of the denar in relation to the euro. This strategy is usually used in small and open economies, that are dealing with high dependence on import of primary products. In this sense, this strategy enables upkeep of the price stability and the inflation expectations.	<i>Croatian Kuna (HRK)</i> Regime of pegged float exchange rate of the Croatian kuna, where HNB occasionally gets involved in the Forex market in order to prevent big oscillations and to keep the exchange rate relatively stable.
Capital adequacy	16,9% (30.06.2014)	21,1% (data from the end of 2013)
Profitability of the banking system	ROAA 0,6% (30.06.2014) ROAE 5,4% (30.06.2014)	ROAA 0,2% ROAE 0,9% (data from the end of 2013)
Population and GDP per capita in USD	2.065.769 inhabitants, GDP per capita 4800 USD	4,256 million inhabitants, GDP per capita 13.330 USD, according to the data from the end of 2013
Other institutions active in the financial markets	Deposit insurance fund, investment funds (which participated with 0,2% of the total assets of the financial institutions in 2013)	HANFA (Croatian Financial Services Supervisory agency), Ministry of finance – Republic of Croatia, DAB (State agency for deposit insurance and bank rehabilitation), CDCC (Central Depository & Clearing Company Inc.), FINA (Financial agency), REGOS (Central Registry of Affiliates), HBOR (Croatian bank for reconstruction and development), TNZ (Money Market Zagreb), ZSE (The Zagreb Stock Exchange).
Rate of NPL (Non-performing loans)	13,2%, in the second quarter of 2014	15,4% in year 2013

Source: NBRM, HNB, World Bank and www.stat.gov.mk

The analysis and the collected data show very interesting facts, such as the relatively low development of the Macedonian financial markets, the limited number of instruments on the primary market and the illiquid and unattractive secondary financial market. The lower stage of development of the Macedonian financial system in comparison with the Croatian financial system can be confirmed when analyzing the number and types of depository and non-depository institutions active on the market. There are larger number of institutions operating on the Croatian financial market.

There are also more employees in the banking sector in the Croatian financial system when compared to the Macedonian. Even though Croatia is more populated than Macedonia, the relative ratio is still much higher.

The number of banks in Macedonia is much lower. The capital adequacy of the banking sector is lower than Croatia's (16,9% as opposed to 21,1%), but they are both quite high.

As previously elaborated, the underdevelopment of the Macedonian economy could also be confirmed with the comparison of the GDP per capita of the both countries. Macedonian's GDP per capita is quite lower than the Croatian's.

However, the data also show the better economical circumstances of the Macedonian banks at the moment due to the 7-th year of recession Croatia has been facing. This explains the better results of the ROAA and ROAE indicators of Macedonian banks at the moment, and the lower rate of NPL (Non-Performing Loans). Croatian banks are now in an unfavorable position due to the stage of economic cycle the country is in.

Has anything changed after the accession of Croatia in the European Union?

When analyzing the two economies, the two financial and banking sectors, one must take into account that both countries did get their negotiation dates for accessing the EU in the same year – 2005, but the Republic of Croatia went through all the reforms and formally and officially accessed the European Union at 01.07.2013, as the 28th member of the Union. The Republic of Macedonia still has the status of candidate country for accession in the EU.

According to this, Croatia and all of the Croatian institutions (especially the financial and institutional segment) are subject to both national and European legislative and regulation. This is a crucial difference between the two countries.

By accessing the EU, the Croatian National Bank has become a part of the European System of Central Banks. Like the other central banks, it is proceeding operations and tasks that are in accordance with the rules, instructions and guidelines adopted by the governing bodies of the ECB.⁸

However, Croatia will not adopt the euro as a national currency yet, as it will have to fulfill some preconditions beforehand. The European Central Bank and the European Commission issue a convergence report every two years, which shows the progress of the country and these reports contain a suggestion if the EU member country should or should not yet introduce the euro.

In the future years, on the day when the euro will be adopted in Croatia, the Croatian National Bank will become a part of the Eurosystem, therefore, it would transfer its whole authorisation in monetary policies and exchange rate operations onto international (EU) institutions, as a part of the functioning of the payment system of the ECB. At the same time, the Croatian National Bank will take part in the proceeding of the monetary and exchange-rate policies, together with the other central banks of EU countries. Furthermore, the tasks of the National central banks (that are part of the Eurosystem) will also conduct the monetary policy, but only as agents of the ECB.⁹

Until that time, the Croatian National Bank will not face many changes in its operations and policies. Thus, it is not to be expected that many changes will arise from the EU membership of the Croatia. However, its effects on the financial, banking and economic system as a whole will occur later on, especially after adopting the euro and officially entering the EMU (European Monetary Union).

⁸ http://www.hnb.hr/medjunarodna_suradnja/h-institucionalni-ustroj.htm (10.02.2015)

⁹ http://www.hnb.hr/medjunarodna_suradnja/hmedjunarodna_suradnja.htm (09.02.2015)

Conclusion

As shown in the grid depiction (in table 6) and the comparison of the two financial systems (and the banking sectors as a part of those systems), it can be concluded that, even though very similar, the two observed countries have been differentiating in many areas.

At the moment, the financial state of the two countries differs significantly. Republic of Croatia has been facing negative growth of the economy in the past 7 years, whereas Macedonia has been lately recognized as the most perspective country on the Balkans.

The Croatian financial system (and the banking sector) is much more developed when compared with the Macedonian, judging by the number of institutions on the market, the number of employees and the total assets of the banking sector. Furthermore, the number of employees in the banking sector as a percentage of the total population in Croatia is quite higher than the one in Macedonia.

The main conclusions of this research have shown that the Macedonian banking sector has not been efficient enough, and a consolidation of the sector is needed in order to stimulate more efficient operations.

Namely, the analysis has shown that the ROAA and ROAE ratios for the banking sector in Macedonia are not as favorable in the analysed period, with exception of the last few years when changes in the Croatian legislative and regulation occurred and in conditions of a recession of the Croatian economy. Therefore, the better ratios in the past few years noted by the Macedonian banking sector should not be attributed to the better efficiency of the banks, rather than to the unfavorable conditions in which Croatian banks operate.

The positive characteristic and the current advantage the Macedonian banks should exploit is the more beneficial conditions they operate in at the moment. All the benefits Macedonia's economy growth offers must be exhausted. Furthermore, the efficiency of the sector should be also encouraged by the implementation of new technologies and innovations in the banking.

With this paper, we have tried to elaborate on the most important issues in the financial and banking sector regarding Republic of Macedonia and Republic of Croatia. The EU membership has had no effects whatsoever. However, it is still very early to say due to the accession of Croatia in July 2013. Furthermore, the 7th year of recession

that Croatia has been facing inevitably leaves its consequences and no analysis could be made without its elaboration.

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